EVALUATING ‘THE PAKISTAN CONNECTION’

An Interactive Qualifying Project Report

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Table of Contents

Abstract ..... - 3 -
Introduction ..... - 4 -
The LRPG at WPI ..... - 8 -
The Current Game ..... - 18 -
  Game Description ..... - 18 -
  Recent Improvements ..... - 22 -
Evaluating the Game ..... - 26 -
  MBTI Personality Types ..... - 26 -
  Engagement and Education ..... - 28 -
  Student Evaluations ..... - 31 -
  Interest Survey ..... - 33 -
Conclusions ..... - 35 -
Bibliography ..... - 38 -
Appendix A: Evaluation Materials and Results ..... - 39 -
  MBTI Distribution ..... - 42 -
Appendix B: Game Materials ..... - 43 -
  Character Sheets ..... - 44 -
  Objective Statement ..... - 78 -
  Sample ‘Wish List’ ..... - 80 -
  Rosa-dos-Ventos Plan ..... - 81 -

Abstract

The “Pakistan Connection” is a 6-8 hour role-playing game designed to address the society-technology and political issues concerning the effort to contain nuclear proliferation. Currently the game is run as the culmination of a 7-week STS course at WPI on the impact of technology on society and the social shaping of technology. Role playing games of this nature were designed with the overall goal of dissemination and adaptation to a variety of topics. Before dissemination is possible, RPGs must be evaluated to determine both their attractiveness to the students and their educational value when compared to standard lecture. An assessment of these factors is presented with this project.

Introduction

This IQP investigates the use of live-action role playing games (LRPG) as an alternative to traditional classroom lecture. Presented here is a mostly qualitative analysis of such games as a continuation of the statistical analysis by Corsetti et al. (2009). The goal of these LRPGs is to provide a more engaging experience than traditional lecture while still maintaining or exceeding similar levels of education and retention. Naturally this style of learning is attractive to a different audience, so care must be taken to structure the game in order to continue to engage those students who excel in a more traditional classroom environment.

Investigated in this report is a full scale LRPG run as part of course on the impact of technology on society. WPI has a well-established history of LRPGs, dating back to a 1995 IQP project by four WPI students (Ives and Ripps, 1995) (Bennett and Caprio, 1996) who normally created games as a form of entertainment, and wanted to try their hand at an educational application. They soon discovered that the game could be used as a way to engage students by placing them in a simulation of a setting where certain knowledge is required to perform well. This first instance of a LRPG simulated a UN conference called by the United Nations Office of Outer Space Affairs to get the space faring nations of the world to cooperate on the development of a solution to the inevitable threat of an asteroid impact. Here we see the establishment of the basic framework of most future LRPGs at WPI: a simulated scenario that requires global cooperation to solve. A few are openly competitive, but they will not be addressed here.

Since this first game at WPI, many revisions of the two main games (Asteroid threat and Nuclear Proliferation) have taken place to shape the games into what was presented as part of this project. This project deals with the third iteration of the Nuclear Proliferation game initially created by Dewhirst et al. in 2001. Originally the games were created by gamers who liked to

improvise and make things up. They were much less structured and sometimes required students to create their own characters for the simulated conference, but usually started with a brief "character sheet". The assumption behind this was that most of the entertainment from the game would come from developing your own personality, but you have a role to play. The game designer was building in certain lines of tension and cooperation.

Research from a test run of the Asteroid game showed that this was true, but not for all students. Students who tended toward the Sensing aspect of the MBTI S-N scale were engaged by the game more than those who tended toward the Intuitive aspect and while Intuitives liked the game format it did not improve their overall grades to encounter the material in this format. By contrast, it was raising the grades of the Sensing students an average of a letter grade IF, they engaged the game. If they did not it actually depressed their average grades compared to a traditional course presentation. So getting the sensing students, especially the SJ, who operate best in a structured task environment, to engage seemed to require at least a well developed character sheet and preferably good briefing papers as well.

Intuitives, on the other hand, especially the NP students three times as common at WPI than in the general population, prefer ill structured task environments and find all this detail constricting. They would actually prefer to write their own character sheets and to their own research on an as needed basis. Since, they were not helped or hurt by the game format, and could ignore the preparatory materials provided if they wished, the games tended to structured up over time, catering to the Sensing students. Thus, when the Dewhirst et al team assembled to do the Nuclear Proliferation game in 2000, and reviewed the Caprio et al game on asteroids as a starting point they were appalled and how encumbered it had become. They tool a minimalist approach to hear as they designed their own game, but were aware that much of the structure had

been added to make the game acceptable to high school level social studies and physics teachers. Since their own goal was to create a game suitable for a HS AP class, they specified that this should be an integrative activity done after the AP test was completed at the end of the year and that spontaneous improvisation and fun should be emphasized. The scenario they developed as a pretext for the game was completely fictitious but involved tensions between India and Pakistan, French Weapons testing in the Pacific and efforts by the Chinese Nationalist government on Taiwan to develop nuclear arms to protect itself from the Peoples Republic of China.

Since the fate of the game was not to be accepted by that audience, but rather to be adopted by the social science faculty teaching at the college level, again the process of structure being added and content taught was repeated. The challenge in this case was that Nuclear proliferation was in the news as this game was run. Sometimes North Korea, sometimes, Iran, sometimes Pakistan were going to come up in the debates. In order to avoid rewriting the game briefings for every run of the game, it was structured around a historical incident documented well in a published book that could be assigned to the class to read. The idea of homework to get ready to play the game would have upset its designers greatly. However, it was the key to success for the Sensing students, and they were the major reason that games were outperforming traditional assignments at the college level for the class as a whole.

In an attempt to engage both ends of the MBTI spectrum, more structure was added in future iterations of all the WPI LRPGs. Perhaps the most important addition was instructor-provided character sheets and country information. The student was now given a specific role to perform, which consisted of a brief biography and the personal views and opinions of the character. While this new structure removed an enjoyable portion of the game for some in the creation of their own character, it allowed the game to attract a broader audience by

accommodating those with less initial knowledge of the subject matter or simply less skilled at improvisation. The introduction of character and country sheets also increased accuracy issues due to the constantly changing real-world data, requiring relatively frequent revision depending on the scenario addressed.

Each iteration of LRPG at WPI has brought the idea closer to the prospect of dissemination off campus. Honing the game has been the focus of multiple student IQP projects, and the game is very near a 'final' product. Along with perfecting the structure, much effort has gone into evaluating the LRPGs both statistically and qualitatively in order to see how this pedagogy compares to traditional classroom lecture.

The LRPG at WPI

The first LRPG at WPI, "AEGIS: An Asteroid Shield for Planet Earth?" was developed by four WPI students (Ives and Ripps, 1995) (Bennett and Caprio, 1996) as part of their IQP. They also ran and evaluated it in 2 field tests, one of these test runs being in an Introductory Sociology Class. Their initial goal was to create an engaging classroom experience that was part of a series of methods labs. In this case the students had read about the Zimbardo Experiment, at Stanford in which college students were recruited to role play guards and prisoners in a mock prison. The WPI class was then asked to play diplomats and technical experts from various space faring nations trying to deal cooperatively with the threat of an asteroid impact. They had to create an institution capable of developing the technology needed to deflect an asteroid, but not told how long Earth had before the next strike. At the end of the game a role of the dice would reveal whether they had beaten the odds and saved a continent or even civilization on planet Earth or not. The problem with cooperation was that all these technologies had military applications as well and tended to be closely guarded secrets.

In total, this game ran for nine iterations, most of them run annually as part of the WPI introductory sociology course. At this point in the development, the game required character sheets, issue specific technical briefings, space agency and military capability briefings, and country cultural briefings that went into typical negotiating behavior for that nation or culture area. . A typical iteration of the game took between six to eight hours and each student submitted an in-role diary, out of role diary, and answered focus questions in lieu of a final term paper.

As the iterations of the game progressed, the country and character briefings became more consistent in format and more detailed, and the characters were also presented with briefings on the typical negotiating behaviors and diplomatic stances of the delegations they

were representing. (Mossey, Marcoux, Lord and Foulkes, 1999) The goal of the first five iterations of the AEGIS game was to create the basic structure of the LRPG to be used in a classroom. Project members focused on developing the game and how to make it educational and fun while still maintaining realism. A secondary goal was to balance the structured portions of the game with the improvisation portions in order to maintain efficiency as well as keep the majority if students engaged in the game. There was some vacillation between having the students do an independent study on their country and brief the class on it before the game or having them read a book on their country that was provided by the instructor and let their behavior and presentations in role tell the story of their country to the rest of those taking part in the game. In the end they ended up with about 50 pages to read about their country.

Fortunately, a sociology book series was producing books on more and more of the nations in the game and soon the Chinese, Japanese, German, Brazilian, Indian and Russian teams all had readily accessible resources. However, the goal was to get it down to 50 high quality and relevant pages of briefing reading and have something comparable for each delegation. This effort would be justified in that it could be used with different topics on global issues about which the "great powers" might to confer, unlike the issue specific briefings which had to relate to the topic.(Carvalho, Gladu and Spino, 2002). Carvalho took the lead in the country briefing revisions process.

The sixth iteration was the point at which the country briefings were substantially completed and the LRPG format was evaluated to see whether it offered any advantage over traditional lecture that took into account the learning style of the students. Spino took the lead in the data analysis of the assessment study. His evaluation demonstrated that the game was serving all types of learners (as identified by the MBTI) equally, but that in doing so it was

disproportionally benefiting one type of learner who had traditionally not fared as well in the course as traditionally taught. Traditionally class assessments were based on term papers and book reviews rather than the products of an LRPG. (Carvalho, Gladu and Spino, 2002) On the traditional assignment, especially book reviews, it was intuitive students who held a one letter grade advantage over sensing students on normal paper assignments (book reports, term papers, etc.).

Yet, when asked to elaborate a character sheet and report on a vivid personal experience it proved to be the sensing students who held the advantage in diary writing over intuitive students. However, there was a conditional effect; sensing students excelled if they were engaged in their role and fully participated in the game. If they had trouble taking the game seriously they drew back from full participation and their journal and final essays were inferior to those of the intuitive students. The Sensing students' grades tended to average slightly higher than those of the intuitive students, who did equally well with book reviews, term papers and diary based assessments. They were not helped by the new format in terms of grades, though they did tend to readily engage the game. It is notable that they got about the same grades on the written work whether or not they engaged the game fully. This was not the case for the sensing students. They had to engage to do well on the essay and journal assignments.

At this point there was some question as to whether the resulting game would pass muster in High School Science and Social Studies classes due to the emphasis of the author's on improvising when one was in a LARP role and did not know the answer to a factual question. Teachers in these fields would want to be sure the students got their facts right. There was also the question of whether it could be used out of the context of a class environment where preparation to get the details right could be enforced?

As early as 1996 an effort was made to produce a HS Physics curriculum based on the asteroid issue (Jakobsen and Waterman, 1996) to support the use of the game in a HS setting. This was not well received due primarily to the complicated math involved in trying to make the necessary points without recourse to using calculus. However, by 2003, Peter Cooper, a graduate of the Mass Academy, had successfully taken the games out of the college classroom and into a conference for students from high schools from around the country like the academy. That year the NCSSSMST conference (National Consortium for Specialized Secondary Schools of Mathematics, science and Technology) was hosted by WPI. Peter demonstrated that with a pool of 200-300 motivated students on campus, self selected pick up groups of 15-25 groups of such students could volunteer to do half day runs of the asteroid and nuclear weapons games, have a great time and get a lot out of it. Preparation was kept to a minimum, 20 pages to read the night before- if you wanted to prepare. It was not required. In debrief they reported that such games would fit into the kinds of science and society oriented curricula they were experiencing in these specialized high schools quite well. However, they would be quite a radical change in the traditional HS setting.

The next instance of a LRPG in the Introductory Sociology Class at WPI was structured as a simulated UNESCO Conference on Mutual Peace and Prosperity for the Mediterranean Region. Like most of the iterations of the AEGIS game, this simulated conference took place as the second half of the course, about six to eight hours total. However, in this case the game debate grew organically out of the "modernization" theme of the course, so the whole course was preparation for the game. As further preparation for the game, the class spent the entire term in teams designated as delegations from different countries (five from Europe and five from the Middle East). Due to time constraints on the first run of the new game, the IQP group

developing the game (Faria and Silverman, 2005) did not feel that writing character sheets for the 50 member class was necessary and that it might detract from the experience. The class was assigned to come up with a personal history of how they rose through the stratification system of their country, and the IQP group presented the class only with country briefings.

The rash assumption was made that WPI students already knew a lot about European nations such as Britain, Spain, Italy, France and Germany so the emphasis was on supporting those representing Middle Eastern nations with briefing papers. Students in the class from Spain and Germany were surprised and concerned about the way their nations were portrayed. They helped coach the teams the next year, in the end writing up additional briefing papers for all the European nations, especially Spain. Later, a student from Turkey would undertake an IQP to improve the briefing materials on his country as well.

The rationale behind the decision to let the students develop their own character sheets for the first time in the game series was that it would be 'more fun' for the class to develop their own character sheets. This was not the case for the whole class; the sensing students were dissatisfied with the lack of structure and did a poor job with the assignment. Most chose to impersonate a real-life official rather than spend the time creating a fictional biography and persona. It was with this run of the game that the advantage of the intuitive students on the MBTI personality measure that had been characteristic on the class prior to the introduction of the role playing games reappeared.

A ten year trend was reversed, so it was clear that there was nothing intrinsic to this curriculum concept that leveled the playing field for intuitive and sensing students. For the games to 'work' for the sensing students and especially the SJ students, they had to be assigned pre-structured roles. This evaluation study confirmed that future LRPGs must be structured in

order to appeal to the largest audience and be worth the extra effort to develop them for classroom use. Meanwhile, a new game on Nuclear Proliferation had been developed and was field tested in another course, and then adopted to become a regular part of it.

The first iteration of the current LRPG format as a nuclear proliferation education tool was by a WPI IQP group (Dewhirst et al., 2001). The 'Global Nuclear Diplomacy' game was designed as a capstone project for a high school advanced placement course. The game is a mock International Atomic Energy Agency (IAEA) conference dealing with the issue of nuclear proliferation, where students are broken up into delegations representing 12 different countries, most of them nuclear armed (Russia, India, Pakistan, China, USA, France) or nuclear capable (Germany, Japan, South Africa, Brazil). This first iteration was a field test, but it was not run in a high school setting. The game was run in a meeting of the WPI Science Fiction Society. As a result, no grading or MBTI types are available for evaluation, but an experienced group of LARPers gave useful feedback.

Many of the comments were on the minimalist design which stressed the minimum of briefing and maximized improvisational acting. The key moment was when the game designer became upset with the way the French delegate was asking- essentially as a lackey of the USA- and stepped in to take over the role and play it as intended facing off with the USA with a snippy tone and heavy sarcasm. The SFS students had never seen anyone benched before and the question of how much role constraint was appropriate got raised in dramatic fashion.

The question of how much structure and how much homework preparation to play the role was needed was an issue again, and the character sheets were turning out to be a key element in the success of the game as a source of realism sufficient to learn some factual content via the game. A similar debate was going on in another field in which instructors had to decide

whether in reenacting the French revolution they could let the students change the actual historical outcome. Were they teaching process or content if Marie Antoinette seduced her jailer, escaped execution and led a successful counter-revolution? Those championing the game felt this had to be allowed or it gave the impression that things had to come out the way they didm that history was inevitable rather than contingent.

In our case dealing with future events regarding future threats what was realistic was harder to define. The character sheets had to be written by someone who had a good overall concept of the event to be depicted and the roles played by the participating nations. However only the starting negotiating position could be constrained, it had to be able to evolve as part of a group process of moving toward consensus.

Other project groups were able to get the nuclear proliferation game into a high school setting where it was well received, but by an AP history class, not the AP science class. Again no grading or MBTI data is available on that HS run since those assessments emphasized logistics and popularity as well as the observations and comments of the instructors.

The Nuclear Proliferation LRPG then moved into the WPI course on the society-technology debate, which deals with the impact of technology on society. Initially it was structured as two separate games, one run on what the IAEA should do in the aftermath of the Chernobyl incident and the other on how to contain nuclear proliferation? The primary goal of this iteration of the game was to work on fixing problems encountered by previous iterations of the game. This iteration re-introduced pre-written character sheets, along with updated country briefings. For the Chernobyl game, students watched a video on the topic instead of receiving a written briefing. Response from the students was positive, but the general consensus was that having two games in one course was too much. As a result the Chernobyl game was removed

from future coursework since the student considered nuclear proliferation the more pressing society-technology problem.

The next iteration was handled by a visiting professor from the Army War College, Professor Peter Campisano in conjunction with a WPI IQP group (Knock & Gagnon, 2005). In order to address some of the common complaints from previous iterations about dated and unrealistic scenarios that had a cold war feel. Many changes were made to this iteration of the game. Character sheets were again removed and students were asked to create their own, similar to some past iterations. However, Professor Campisano asked students to research a real IAEA negotiator and take on their personality for the game. By doing so he retained the degree of structure necessary to satisfy all types of learners while avoiding having to prepare fictional character sheets for the class.

In order to accommodate students' research and to appease those who believed the game was too short, Professor Campisano ran the game for three and a half weeks, so preparation and the game run dominated the 7 week course. After the game was run, the project group ran an analysis similar to that run in previous games and again found that the LRPG was a much more balanced method of education across all learning types than the traditional classroom structure. This iteration of the course was extremely popular, one student commented that this was what college was supposed to be like, but rarely was. The returning regular professor (Wilkes) noted that the course had become a tutorial and debate on one topic, nuclear proliferation, and decided that that solution sacrificed too many of the course's other goals to become the regular format, though it had played to the strength of the substitute instructor very well indeed.

The goal for the next IQP group (Roberts & Lane, 2006) was to continue reducing the gap between learning types without devoting an entire course to the game. This group also

sought to keep the game 'authentic' by basing it off of real-world events instead of continuing the previous trend of using fictitious scenarios. Roberts & Lane re-implemented the fictitious character sheets, basing them off of the sheets used by Dewhirst et al. in 2001 for the "Global Nuclear Diplomacy" game. They also continued to use country briefings, but began basing them off of current events and recent press coverage.

The scenario for the game, now called "The Pakistan Connection," was based on a well-documented case, the A.Q. Khan case. The A.Q. Khan case is the case of a Pakistani national hero who "shopped" for the elements of his country's bomb in many cases, but then, served as an agent for hire to do the same for other countries such as Libya and Iran, effectively selling state secrets. He also bartered them with North Korea to get missile technology for a delivery system. This case of a non-state actor actively disseminating nuclear weapons and materials refinement technologies to foreign governments through black market channels (Corera, 2006) changed the nature of the proliferation problem so much that it obsolete the institutions set up by the UN to control this technology.

The game scenario is now how to prevent the clandestine spread of nuclear weapons technologies in light of these developments and what to do if the technology becomes out of control (a subject that meshes well with the Society-Technology Debate course theme). This new game, 'The Pakistan Connection,' provides a quasi-fictitious structure for future iterations of the LRPG and is the course format and structure evaluated by this "participant observation" IQP. The author got to play in one round of the game which was run by the IQP team of (Duval, Johnson and Secatore, 2008) and noted some things that seemed "dated". In the current (2009) iteration I would role play the head of the IAEA, and essentially run the game using mostly existing materials but some new ones as well.

A survey instrument was developed to answer a specific question and this time MBTI data was gathered in an effort to see if the mature version of the game was balanced, as had been the space policy game. It is worth noting that in this run of the game a "Visionary Scientist" role was introduced and space issues were mixed with those of nuclear power as the game players delved into the case for a fusion nuclear technology, especially if Helium-3 became available from mines on the moon. It was not the same game I played- there was much more looking to the future---and that had unexpected implications due to the high engagement of key members of the class, especially the Brazilian delegation. I would get to witness another round of the game which was "what college was supposed to be like" but rarely was. Hence, the formal evaluation apparatus really can't do justice to the event that unfolded around me.

My main job is to account for the special success of this round of the game and try to make it possible to recapture in the future. I also want to answer some specific questions about the mix of personalities in this class, whether it was typical of the WPI general population and find out whether it was a special flight of the intuitives in the class who got into the futuristic stuff, or whether the sensing students stayed engaged and got as much out of it as their intuitive classmates, the pattern we have seen before with the space and asteroids game.

The Current Game

Game Description

"The Pakistan Connection" is a live-action role playing game (LRPG) currently being run as part of the Society-Technology Debate course at WPI. However, it may deserve broader attention and part of this project involved discussions of other courses into which it might fit and the case for dissemination into classes that are part of the STS major programs offered at other colleges and universities.

The WPI course sets out to investigate the impact of technology on society and the social shaping of technology. It also covers societal policies involving the regulation and control of technology. The game is run as the capstone of the course, and generally runs between six to eight hours, intended to take the place of a term paper as the culmination of the course. Structured similar to a Model UN, students are separated into delegations and asked to introduce resolutions on a provided scenario and attempt to reach consensus on a solution to a problem involving international politics or requiring international cooperation.

The students are taking part in a simulated special conference of the International Atomic Energy Agency (IAEA), which is loosely associated with the UN as it emerged from discussions in UN committees after World War two, but not all members of the UN are members of the IAEA. It is primarily a gathering of nuclear nations and those that could build nuclear weapons but have signed the Nuclear Proliferation Treaty (NPT) and limited themselves to the peaceful use of the atom. These latter are in the majority in the IAEA, but not at our conference which is a special committee concerned specifically with the problem of nuclear arms proliferation. Hence, some nations that are in violation of the NPT were also in attendance as invited interested parties

or observers as it is their behavior one is trying to influence, drawing them in to compliance with the UN NPT or to cooperate in some other way.

The class is broken up into small groups (3, 4, or 5 members depending on class size), where each of the groups represents a certain nation, normally 12-14 nations, but the game could be played with as few as 5-6 delegations. Over the last few years this class has ranged from 16-38 students. Historically it has been as large as 45 and was originally designed for 3 person teams. The best runs of the game have been with classes in the 15-21 student range with delegations of 2-3 students. Each group member is assigned a pre-written role that they are to take on for the conference. The roles may vary depending on the nature of the conference, but generally include some combination of 2-3 the following: diplomat, military advisor, technical advisor, visionary scientist, and economic advisor. The minimum team consists of a diplomat and a technical advisor.

The game itself is mediated by someone acting as the "game master," a position generally held by either the instructor or 1-2 members of an IQP group doing an assessment study. The game master is there to keep the game organized and on-track, along with acting as a source of information about both the game and real-world topics. Often the game master will step in to correct students if they present incorrect information or act outside the scope of their roles. He or she is also the "rest of the world", so if the US delegation needs to confer with the State Department in Washington or the Japanese Delegation with MITI in Tokyo, the message goes to the game master and they get their official answer in a few minutes.

Historically, teams have asked for everything from war games to be initiated on the Russo- Chinese border to permission to tell the truth about something that is a state secret. Once, a member of another delegation was "delayed" so that he could not get back for an important

meeting by trouble with the Geneva Police involving a prostitute found in his hotel room. Diplomatic immunity was invoked, but the 20 minute delay was enough to make him miss a key vote. On another occasion someone defected to the West from China and another member of the delegation was sent home and assigned to a "re-education camp". The game master is "all powerful" but does not let the players do everything they want to do. Requests for assassinations and preemptive nuclear strikes have been refused. Listening devices are sometimes allowed to be planted in a delegation meeting, but not always. Information from the CIA on who was the Mossad agent on a given delegation was also denied.

However, normally the role of the Game Master is to facilitate the game by supplying timely information and playing the "outside" world. Sometimes things happen in the outside world- for real, when riots break out in one's capital and the government you supposedly represent is out of power. When the game master distributes press coverage that impacts the game, the players tend to adjust rapidly. In one case a tough negotiator suddenly became compliant as he suddenly found that he did not want to go home and started seeking deals in return for political asylum. Events can also be made up. Once, a terrorist group in Turkey was said by the Game master to have taken Christian missionaries from Spain and Germany hostage for trying to turn people from the true faith. That was made up, but illustrated the impact of current events involving statement by the Pope on negotiations to try to reshape the future. The European delegations took a significantly different approach to the conference in light of these events in turkey than they had before this announcement.

Once assigned to their delegations, each group is asked to prepare a briefing on their country to distribute to the rest of the delegations. This briefing should be concise and provide general information on the country, mainly military and nuclear capacities, that the real-life

delegates would already have knowledge of. The majority of the Pre-session of the game is devoted to distributing and the briefings. The game master (posing as the IAEA Secretary General) then gives the opening remarks for the conference, which include a statement of current affairs and a briefing on the objective of the conference. With this presentation the class is provided an IAEA 'wish list' of topics to be discussed during the game in order to focus their efforts. In effect, the IAEA is there to ask for more power from its members, curtailing their independence to a degree. This is always a hard sell, but the AQ Khan case suggests that the institution is failing to do its job, and thus the leadership is being called to account and asked what they need to get it right and get the job done of controlling nuclear proliferation under the changed circumstances.

With these guidelines in place, the delegations are asked to think of some initial proposals or counter-proposals to present at the next meeting of the class in order to start the discussion. The remainder of the game is spent discussing and voting on proposals in order to best address the scenarios presented in the opening remarks. Opening statements prove to be the basis for alliance formation in most cases. In the games I witnessed 12-13 delegations soon became 3 voting blocs one of which became the majority position.

Sometimes the alliances would surprise people well versed in the international politics and aware of which nations normally cooperate on a range of issues in the real world. In this case things are more likely to be dependent on perceived self interest on this one issue, and the result can be strange bedfellows as nations try to avoid being as politically isolated in the game as they are in the real world. It is also common for the US delegation to be overconfident, and take lots of criticism from many quarters. That this is highly educational both for the critics and

the home team is evident from the in and out of role journals each member of the class submits at the end of the game in lieu of a term paper.

Recent Improvements

The most recent iterations of the LRPG have made a few major changes in order to improve the authenticity and educational value of the game. The first change was to allow for smaller group discussions instead of keeping the entire class in general assembly for the substantial majority of the game's duration. Students were given time to split into groups by profession and brainstorm ideas to bring back to the general assembly. This allowed the class to stay focused and spend time addressing the issues they were prepared for instead of wasting time on discussions they do not feel comfortable enough with the subject matter to take place in (e.g. the technical advisors discussing diplomacy). A second change was the addition of diplomatic goals presented to the delegations. Initially the goals were presented to each delegation as a letter from their respective heads of state. For future iterations of the game the goals I experimented with during this iteration of the game were included on each students' revised character sheet after the game.

As a participant in one run of the LRPG at WPI as part of the Society-Technology Debate course, I had a viewpoint unique among the IQP groups who have addressed LRPGs for the classroom. My overall impression of the game was very positive, but I felt that the discussion was not focused enough when left up to the class to direct the conference. Because of this, I introduced two new aspects to the game as I played the role of game master out of role and head of IAEA in role. First, I required that every group member become familiar with current events in their land (at least those prominent enough to appear in the New York Times and similar news

organizations) regarding global politics, nuclear proliferation, and nuclear energy. To do this I indexed a few hundred news, magazine, and journal articles from the past three to four years and asked each group member to become familiar with about ten of them. In order to decrease the individual workload, I asked each member to become familiar with one subject area and present that information to the rest of the delegation (additionally, each member was responsible for knowing basic current affairs of the country they were representing).

For my run of the game, a group member was responsible for one of the following news subjects: regional politics, global nuclear weapons proliferation, global nuclear energy development, and the current state of Chernobyl, which is a warning about what a breach of plant security could result in. The rationale behind this was to give the entire class a general understanding of the global political climate regarding both nuclear energy and weapons technology, along with what can happen when something (e.g. Chernobyl) goes wrong. The year I was a player Chernobyl did not come up in class until after the game, however, the delegations also included someone reading a book on the chemical accident at Bhopal that devastated a city in India. So the idea that the safety of substantial populations was at stake could hardly be lost on the game players either year. But the connection was clearer if the technical expert had seen the "Suicide Mission to Chernobyl" videotape, and they did seem to take the game more seriously in the round I game mastered than the class in which I was part of the rank and file the year before. Along with allowing all members to be familiar enough to participate in discussions, it also served as an awareness raising exercise they could utilize outside the classroom.

The second and most influential change was the 'feeding' of proposals by the game master to the general conference in order to focus discussion and save wasted time. The primary motivation behind this addition was not my personal experience with the course (though

certainly a factor), but rather time constraints imposed by other activities on the course syllabus that required the game to be shortened. The first plan introduced was 'The Russian Plan,' which was a proposal for countries with nuclear capabilities to sell materials and technology to developing nations for use with nuclear energy applications. Based on an actual proposal put forth to the IAEA by Russia to ease the Iran crisis in 2007, this idea found its way into the 2008 iteration of the LRPG as a proposal the game master introduced to the Russian delegation after briefing them. It emerged as a formal proposal with embellishments from that round of the game. This was presented to the class as a focus point (interestingly enough, this plan was remarkably similar to the proposal independently reached by another voting bloc in the 2008 iteration of the game). The proposal is presented to the delegations, who are then asked to expand on the proposal by adding the punishments, rewards, classifications, etc. necessary for it to be passed into effect.

The second proposal presented to the class was 'The Brazilian Plan,' which was fabricated by me and the professor. The plan called for nuclear capable countries to send their nuclear weapons stockpiles to a historically neutral country under the care of the UN or some other international body. This stockpile would be slowly disassembled but a reserve will be kept as a deterrent against non-participating nations attacking participating nations with nuclear arms. This still allows for mutually assured destruction but enables participant countries to use the newly freed funds for other domestic applications. This highly controversial proposal was also presented to the class, where they were asked to modify it for vote as a replacement or addition to the previously introduced 'Russian Plan.'

The two proposals certainly focused the class and enabled some excellent discussions due to their highly controversial nature. The run of the game finished on its shortened schedule, but

the overwhelming consensus from the class was that the game was too short to adequately discuss 'The Brazillian Plan.' In this case an actual Brazilian serving on the North Korean delegation took over the process of renamed it the "Rose of the Winds [of Change]" plan, but kept it in the native language as the "Rosa-dos-Ventos" plan. You can hardly imagine the impact on negotiations of having no Brazilian delegation present, but having the South African and North Korean Teams join forces behind the lead of the Japanese to bring about international disarmament- ie. get the world powers to give up their nuclear arms advantage. Knowing that the North Koreans were on board if this plan was approved had substantial impact on the proceedings.

Evaluating the Game

MBTI Personality Types

The most important variable examined as part of the most recent iterations of 'The Pakistan Connection' is the Psychological Type (MBTI) preferences of the students and how it affects their classroom performance. Their MBTI preference can be used to indicate their style of learning, knowledge of which can be used by the instructor to tailor the game over time. Knowing the average distributions of learning styles among the body of students interested in taking courses including LRPGs is extremely helpful in making changes to the game in order to accommodate the largest cross section of students possible. This modification makes it possible to engage the most students and assist in the retention of information presented during the game. By knowing the effect of an LRPG on students of certain "cognitive style" preferences it is possible to see who will and will not benefit from the replacement of traditional lecture with such games.

The method used most by the IQP teams investigating LRPGs at WPI is the Myers-Briggs Type Indicator (MBTI) method. The MBTI is based on the work of Carl Gustav Jung, a Swiss psychiatrist and founder of analytical psychology. Jung classified human personality using 4 dimensions to produce eight main personality types obtained by combining an introversion/extraversion dimension with sensing/intuitive and thinking/feeling dimensions (Fordham, 1953). These dimensions were added to by Isabel Myers and Catherine Briggs, who introduced a judging/perception dimension in order to discern the dominant mental function of one's personality. Using these four dimensions the MBTI method was formed, which classified people into sixteen different personality types.

By classifying students according to these personality types, instructors are able to structure their courses in order to engage as many students as possible and improve their performance in the class. This classification is very important to the analysis of LRPGs as educational tools because it allows the instructor to see if it holds an advantage over the traditional classroom structure in terms of engagement and information retention and whether there is a tradeoff in the loss of one type of learner to more completely engage another type.. Though traditionally used to separate people into either eight or sixteen different personality types, students investigating the LRPGs at WPI have tended to only use two of the four dimensions (sensing/intuitive and judging/perception), resulting in only four personality based learning style classifications. The polar opposite SJ and NP types are the ones to watch as an instructor or curriculum developer structures or de-structures the task environment.

The actual application of the MBTI indicator is simple. Students are asked to fill out a 100 question questionnaire which is then graded and used to determine the student's personality type. The results, along with some information on their personality, are returned to the student for their information. Records are also kept by the professor and any evaluating team for use in categorizing results, observations, and data.

The first WPI IQP group to use the MBTI to evaluate a WPI class (other than Bennett and Caprio (1996) reporting on the AEGIS game data collected in 1995) was Borg and Shapiro in 1997, who administered the test to an economics class to see if there was any correlation between personality type, teaching style, and grade obtained. The class was divided into three sections, each taught using a different style. One professor established personal relationships with the students and used a class structure that often deviated from the syllabus. A second professor taught a traditional lecture course that adhered to the syllabus and only maintained a

professional relationship. The third professor also ran a traditional lecture that adhered to the syllabus, but would often try to engage students with questions (questions he usually answered himself). In terms of average grades and student satisfaction, the first method was the most successful. Students performed well with one teaching method and poorly with another, performance that correlated well with their psychological type based learning styles. These findings supported the need for a teaching style that engages most (ideally all) learning styles equally instead of favoring one style over another in order to achieve the best teaching method. (Borg and Shapiro, 1997)

Engagement and Education

In the iteration of the LRPG run by the 2007 IQP team of Bennett, Ian M., Craig, Keith, and Tibbetts, Nathan, "Assessing the Pakistan Connection Game" l the LRPG was evaluated based on a variable termed the Comprehensive Immersion Factor (CIF). The CIF was used to evaluate the in-character journals written by the students during the course of the game. The results obtained were intended to be a fair balance of subjective and objective analysis and served as an indicator of whether or not what the students have taken out of the game expresses the intent of the game's design. (Bennett et al., 2007) The immersion metric is a basic measure of the amount of effort put into playing the role as given by the character assignment. The comprehension metric is a basic measure of the education the student has received about the world issues presented as part of the game. The group found that the perceptive students (as classified by the MBTI) had the highest CIF scores, while the lower CIF results of the extraverts seemed to indicate they focused more on the details of the game rather than real-world events. From the student averages, the LRPG seemed to help the extraverts the most, as they had the

highest averages at the end of the course. In paper, the majority of the class seemed to be able to accurately portray their character, though the Feeling students seemed to excel in this regard. Overall, the journals seemed to show that the game succeeded in its objective of raising the entire class' awareness of the global issue of nuclear proliferation. (Bennett et al., 2007)

In the iteration of the LRPG run by the 2008 IQP (Corsetti et al.), many more variables were introduced to create a much more rigorous and statistical evaluation of the game. This was the class in which I was one of the subjects. Along with preexisting variables (gender, class year, MBTI category), students were evaluated based on engagement and satisfaction on the outcome of the game. Engagement assessment was based on the so-called 'Trichotomy of Engagement,' which evaluated the group using an essay on the final exam, journals, and subjective data collected during game play. Students were asked to write in-role diaries during the course of the game, a requirement similar to the past few iterations of the LRPG. These in-role diaries were read by the professor and the IQP group, who each graded them according to a subjective assessment of the student's engagement. An average grade was then taken and used for the data set.

The second evaluation of engagement was a question on the final exam based on the LRPG run during the course. The question was again read by the professor and the IQP group, who graded them using the same method as the in-role journals. The readers were looking for how well the student showed the knowledge of their delegation's position as well as the overall global situation. For example, students were judged to be highly engaged if they looked at the overall situation and could predict a plausible solution.

The final evaluation of engagement was a subjective assessment by the IQP group during the game play itself. Students were asked to prepare presentations on their countries for the first

session of the game in order to brief the other delegations. Well developed presentations were judged to show a higher engagement by the students than poorly prepared presentations. A similar assessment was made on the opening statements each delegation presented during the second session of the conference. Also included in this assessment were personal opinions of the professor and the IQP group on which students they felt were excelling in the game.

Once this engagement data was finalized, the IQP team analyzed it using a statistical software package to see if they could find any correlation between the included variables. The team found that there was a fairly even distribution of engagement between the Intuitive and Sensing students (as defined by the MBTI), which shows that the game engaged students of multiple cognitive styles. It was also shown that the Intuitive advantage normally seen on written examinations was removed on the second half of the final, where the advantage lay with the most engaged students and not with specific cognitive styles. (Corsetti et al., 2009)

For the 2009 iteration of the LRPG, students were again asked to provide daily in-role journal entries to the professor. These journal entries were examined qualitatively by myself and the professor for engagement in the game. When compared to grading data, the results obtained closely mirrored those of previous IQP groups. The students who showed the most engagement while writing the in-role journals tended to perform well on the portion of the final exam dealing with nuclear proliferation.

In addition to questions from the first half of the course, the second half of the final was a brainstorming question. Students were asked to place themselves ten years into the future after the conclusion of the mock IAEA conference and write an essay on the global effect of the Rosa-Dos-Ventos plan (detailed in the appendix) had it passed, and the global situation if it had not.

After evaluating all the essays, it was found that those students previously shown to be most engaged in the LRPG performed the best on the final essay pertaining to nuclear proliferation.

Student Evaluations

In addition to the in-role exercises during the game, participants in the LRPGs at WPI are asked to give their personal evaluation of the game itself. These evaluations were not graded and were only requested in order to improve the game for future iterations. The 2008 iteration of the game run by Corsetti et al. also included an out-of role debrief session where students were asked questions about other options for LRPGs at WPI.

The general response from the students was that more information would have been very helpful during the game. They felt that more information should have been presented as part of the class, but that some of the required preparation reading (in this case *Five Past Midnight in Bhopal* and *Shopping for Bombs*) was very useful to all participants. Participants were also asked if different topics would have been more interesting. Many students put forth alternate ideas from nuclear proliferation, including biotechnology and alternate fuels. The IQP group felt that the students seemed to be more interested in technology than politics. (Corsetti et al., 2009) Overall, many of the students felt that the game didn't fit well with the previous topics of the course, but (interestingly enough) didn't think the game was long enough.

For the iteration of the game as part of this project, students were again asked to give personal evaluations of the game. Unfortunately, due to time constraints this iteration of the game was not able to include a formal debriefing session, though student opinions were well laid out in their evaluations.

The majority of students believed that the game was a more engaging use of class time than a traditional lecture, and that they learned more than they felt they would otherwise. Many stated that although they could have covered more material in the same amount of time, they would not have actually learned it. Students felt that the subject matter presented was informative and opened their eyes to important global issues regarding nuclear proliferation they were not familiar with before they participated in the game. Most admitted that they were either uninformed or simply misinformed about the subject matter, and that the game really helped them to understand how complicated international collaboration on these issues really is.

The most frequent complaint about the most recent iteration of the game was its length. Almost all of the students commented that the game was much too short and they would have greatly enjoyed spending more time on the simulated conference. One of the most interesting complaints came from one of the participants about their inter-group briefings. As stated before, I had each group member become familiar with a certain subject matter and present the information to the rest of the group. One problem with this method not considered was a group member presenting a flawed or incomplete assessment to the rest of the group. This presents a problem not generally encountered in a traditional classroom setting, and may require some intervention by the professor in future iterations of the game.

Also expressed by a few students was their dissatisfaction with the visionary scientist role during this iteration of the game. Previous iterations of the game included an economic advisor in some of the delegations in order to have enough roles for the entire class, a role not very well suited for the course. For this run of the game, a visionary scientist role was introduced to take the place of the economic advisor role in the delegations. The role was designed as a forward-thinking science advisor who specialized in ‘future’ technologies, such as nuclear fusion and

lunar settlements, a role that fit well with a portion of the course dealing with the novel *2081*. *2081* was written in 1981 by Gerard K. O'Neill as a look into the technologies envisioned 100 years in the future. The visionary scientist role was intended to bring issues in developing nuclear fusion technologies to the conference as a thinking point for policies restricting the distribution of nuclear materials and technologies. Due to its recent implementation, the role was not nearly as well presented as the other roles, which have been part of the game for several years. As a result, students assigned this role did not feel as engaged in the conference as those assigned different roles.

Interest Survey

Along with participant reactions, it is also prudent to find some way to gauge interest among a more general population. The opinions of students who have already participated in a LRPG will obviously be biased when asked their interest level in a course containing a game. As a result, a survey was designed to be administered to a sample of the general student population at WPI. The survey contained several social science course descriptions and asked students to rank them on a five-point scale based on their interest in taking the course. There was also an additional line added for students to optionally supply their MBTI cognitive type so the investigators could see if any correlations could be made between interest levels and cognitive style. The course descriptions contained two courses already part of the curriculum (Feed the World, Power the World), one proposed course (Global Wealth, Power and Technology), and three fabricated courses. Two of the three fabricated courses were centered on LRPGs, one

based on The Pakistan Connection and another based on the AEGIS game. The final fabricated course built around a video tape series focused on the contemporary American healthcare crisis.

The survey was administered to an introductory sociology course in 2009. The surveys were handed out in conjunction with the return of MBTI data to students in the class. Unfortunately, the sample only contained 22 students, making it difficult to make statistically valid correlations between MBTI type and interest level of the general WPI population. The best possible conclusions to be gained from analyzing the survey data are possible trends to investigate should data from a larger sample ever be gathered.

Some conclusions, however, can be made even with the small sample size and used as comparison points for later studies. The courses were divided into categories: role playing games, 'save the world' courses (food/power), and social issue courses (health/global inequality). Data was divided into quartiles, with 2-4 being low interest, 5 being some interest, 6 being moderate interest, and 7-10 being high interest. The highest score for the role playing games was an 8, and both the 'save the world' and social issue courses had high scores of 9 and 10. Extraverts were more likely than introverts to be very interested in role playing games and courses that dealt with 'saving the world.' No difference in interest between extraverts and introverts was seen with the social issue courses.

Delving deeper into the MBTI cognitive type classifications, there were no clear results for the SN or TF cognitive types. P's seemed more interested than the J's in role playing games and social issue courses, with no difference in interest in the 'save the world' course offerings. Crossing the SN and JP cognitive types revealed other trends as well. SJ's were the least likely group to be interested in courses on social issues, and NJ, NP, and SP's were only about 50% interested. The groups most interested in the 'save the world' course offerings were the NJ's and

NP's, with interests of 50% and 40%, respectively. Groups most enthusiastic about role playing games were the SP and NP types, with about 75% being very or moderately interested in the courses.

The easiest way to summarize the survey results is to look at the percentage of those who fell into the 4-5 interest range from the SJ and NP cognitive types. These two types were chosen because it seems to be difficult to appeal to both groups at the same time. Feed the World (0% SJ, 25% NP) and The Pakistan Connection (14% SJ, 0% NP) were clear losers in this regard. The American Health Crisis (28% SJ, 24% NP) achieved a low but balanced result, and Global Wealth, Power and Technology (43% SJ, 67% NP) was a clear winner for NP's. This leaves Power the World (57% SJ, 50% NP) and the AEGIS (43% SJ, 50% NP) game as the clear winners of interest in this inspection. This summary shows that interest may not be specifically tied to the course format as initially theorized. It seems that the topic of the course is more important to most students than the overall format, ie. using videos, an LRPG or not.

The question I hoped to answer was whether the LRPG Pakistan connection could be the basis for a standalone course that would attract a reasonable enrollment. The answer seems to be no. In the context of a course that makes the case for looking into this scary subject the students engaged it and wanted more time devoted to the game. However, as a freshman seminar offering they would not have signed up for it in great numbers if courses on the energy crisis, the health crisis or the Asteroid threat from space were available alternatives. It could have competed with the "Feed the World" offering in that program, which while less popular was being successfully offered. The Pakistan Connection should stay where it is, in the context of a course with a broader mandate than just to consciousness raise about nuclear power issues.

Conclusions

Based on student evaluations from all iterations of LRPGs run at WPI, the general consensus is that gaming is a valid educational tool when properly implemented. Most students felt that the LRPG portion of the course was the most entertaining and engaging part, and they claimed to have learned a great deal from the experience. Based on graded evaluations, the game has been shown to be very helpful in helping students learn and understand the global political and technological issues that accompany things like nuclear proliferation or the challenge of building a global asteroid shield.

While the LRPGs are very well fitted to the science and policy studies coursework at WPI, I do not believe they are currently suited for a 'pick up and play' style of gaming. In its current form there is still a good deal of work to be done between iterations in order to get the highest engagement. For topics as dynamic as nuclear proliferation, effort must be taken to keep the background information, character sheets, and country briefings as current as possible in order to get full engagement and the best educational value. The students like to think of themselves as debating the great issues of the day, not doing a canned exercise. The game run as part of this project provided a list of news articles on various topics for them to read, and some effort must be taken on the professor's part to maintain the list as events unfold.

My improvements seem to have edged the game to a new level, and while some of the action I witnessed is probably the luck of the draw, in terms of a Brazilian student being intrigued with the possibility of real reform and being able to deliver North Korea, something special happened here. Further, this is the second time it has happened in this course with this game in a series of 4 offerings. A 50% hit rate for really great educational experiences is not to

be scorned. Even when it is less than great, this is quite a good course. I was in a run that was less than great and can attest to that.

It is time to try to disseminate it to other campuses with STS programs or where they teach about international affairs in formal course offerings that are seminar style and include debates.

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Appendix A: Evaluation Materials and Results

Included within this appendix are the materials used over the course of this IQP to evaluate the role playing game. Copies of the surveys, questions, and the raw data are provided.

The Great Problem Seminars are two-course sequences designed to serve as an introduction to project work and university-level research with a focus on themes of current global importance. All the work the students do is tied to current events, societal problems, and human needs. New themes are presented each year, including:

- **The Feed the World Seminar**: This course is built around a sequence of projects tied to food, ranging from the biology of genetically engineered corn to the ethics of price supports and fair trade.

- **The Power the World Seminar:** This course is built around a sequence of projects tied to energy, ranging from the physics of power generation to the ways that new technologies have changed societies.

In addition, the Social Science department is considering additional courses that fit into the same framework and ideology as the current Great Problem Seminars. Proposed courses include:

- **Global Wealth, Power, and Technology**: Students in this course will explore the discrepancy in the distribution of wealth, power, and technology continent by continent throughout the world. Teams will work with and give presentations on anthropological and culture studies, along with technology and biology driven views of human history.

- **The American Healthcare Crisis**: Students in this course will view the film *Unnatural Causes*, an extended documentary on the decline in health of the American population over the last generation. It also reveals that the relationship of health to social class and race in America is stronger than in other developed societies. Teams will investigate the connection of health to housing, income and other social policies as well as propose and debate solutions to the national crisis.

Role-playing games, such as Model UN and Mock Trial, and their appeal to students as a teaching method has been the subject of multiple IQP projects at WPI. Games like these allow students to think and debate international issues and gain insight into the technological and societal ramifications of certain issues. Topics include:

- **The Pakistan Connection**: Students in this will spend time investigating and discussing the A.Q. Khan nuclear arms network and the nuclear technology capacities of multiple countries. Small groups are formed and assigned a country to represent as a delegation. Each team is briefed on related current events and also the political stances of the country they represent. The delegations debate the issue and propose changes in the way the International Atomic Energy Agency addresses the issue of nuclear arms proliferation.

- **Defend Planet Earth**: Students in this course will debate the case for international action to be taken to address the potential threat of an asteroid heading for a collision with Earth. In a model UN format, small groups are formed and assigned a country to represent as a delegation. Each team is briefed on both the political stance and technological capability of the country they represent. The delegations debate the issue and propose and vote on resolutions concerning how to prepare for this inevitable event.

We ask that you place yourself in the situation of having to take these courses in order to fulfill your social science requirement at WPI. In the spaces below, please rank the above courses on a scale of 1-5 based on your interest in the course (5 being very interested, 1 being not at all interested). There is also space at the bottom of the page for any comments you may have.

Please do not write your name on this sheet.

Your MBTI Learning Style: _____ (optional)
Preference Weight: ___ ___ ___ ___ (optional)

Feed the World Seminar

1 2 3 4 5

Power the World Seminar

1 2 3 4 5

Global Wealth, Power, and Technology

1 2 3 4 5

The American Healthcare Crisis

1 2 3 4 5

The Pakistan Connection

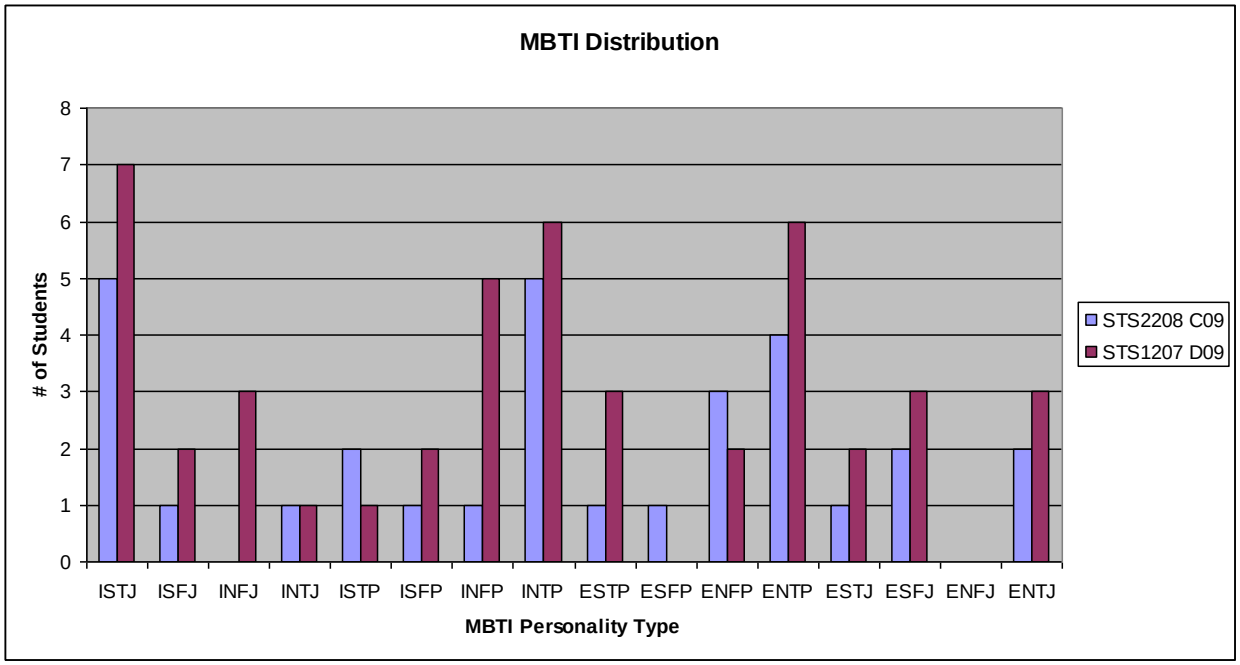
1 2 3 4 5

Defend Planet Earth

1 2 3 4 5

Comments:

MBTI Distribution



Sample Size:
STS2208 C09: 30
STS1207 D09: 46
Total: 76

Appendix B: Game Materials

Included within this appendix is a sample of the framework of materials necessary for a successful run of 'The Pakistan Connection.' This appendix is not exhaustive; some supplemental information will be required in order to complete preparation for a run of the game. Modifications and additions to this material are allowed, even encouraged, in order to keep future runs of the game relevant to the current global political climate. Also included in this appendix is a copy of the 'Rosa Dos Ventos Plan,' a product of the game run as part of the STS2008 course in D-Term 2009.

Character Sheets

Bernard / Bernadette Devereux
France Head Diplomat

Description:

You were born and raised in Rennes. Your father was descended from a long line of French nobility and the mother is part of a large family of wealthy businessman and venture capitalists. You grew the third oldest among five children. Many of your early skills of negotiation developed from settling disputes between your siblings. You were quite a troublemaker in your youth but you took advantage of your family's political position and your own personal ability of talking yourself out of a corner.

You were educated in Paris at the College Stanislas, Harvard in the United States and then the École Nationale d'Administration (ENA). Your father pushed you to enter military college and you attended Saint-Cyr for one year before dropping out. This crushed your father but you disliked the rigid structure of military school. You instead decided to work your way up the ladder of civil service.

After various low level civil servants jobs, you begin to rise quickly through the ranks and catch the eye of the current Prime Minister. The Prime Minister appoints you head of his staff. This move effectively shoves you into the political and public eye. In a few years you become head of the Ministry of Social Affairs, a post that you did not enjoy but remained in for 4 years. You then spent 2 years as a member of the National Assembly as representative to Paris.

You were then offered the post of head of Ministry of Agriculture and Rural Development. You antagonized other countries for there conflicting policies against your own and scrutinized heavily the current policies of your administration. You make heavy changes that have a significant effect on the farming community.

The Prime Minister chooses you to attend the meeting of the IAEA for your negotiating skills, your ability to defuse a situation but also your ability to shake things up. You are known by your peers for a superior ability to cut through the clutter right to heart of the problem.

Views:

You believe that your country can never disarm all of their nuclear weapons. You feel that peace between superpowers can be contingent on mutually assured destruction, and that losing that disincentive could lead to a new World War.

You also believe that your country cannot allow other countries to develop nuclear weapons. You feel that additional proliferation to less developed nations will lead to global political instability. Additionally, the more widespread nuclear weapons are, you feel, the more likely a radical nation or extremist group could acquire one.

Goals:

Mutually assured destruction is a functional doctrine, but as more and more countries acquire nuclear weapons, the chances of a rogue nation eschewing it increase. As a result, your government wants countries currently developing nuclear weaponry to cease additional development. Additionally, it would like to see no new nations develop nuclear weapons. Your goal at this conference is to espouse this viewpoint and give the IAEA the powers necessary to make it a reality.

Daniel / Danielle Garnier
France Visionary Scientist

Description:

You were born in Villeneuve-le-Roi in the Val-de-Marne. You grew up in a political family - your father was the mayor of Biarritz and your mother was a city councilor in Paris. During a period of personal rebellion you joined the French Armed Forces for 5 years and returned as a more disciplined and determined person. You attended the University of Paris, where you got your doctorate in mechanical engineering with a minor in nuclear physics. You became a senior lecturer at that university before returning home and using your father's political position to springboard yourself on the French political scene.

You became a municipal councilor for Biarritz and then Ciboure. You were then elected to the National Assembly to represent Pyrénées-Atlantiques. You then made a lateral move to become mayor of Saint-Jean-de-Luz. You then became Minister of Defense, working closely with the Prime Minister on many occasions. During your term as Minister, you frequently pushed for funding of research and development, particularly related to the future of nuclear energy as a power source.

Your close friendship with the Prime Minister has led him to send you to the IAEA Special Assembly to represent France's military interests. You consider yourself more of a scientist then a military expert but you have served in the armed forces and you are extremely knowledgeable of the French military and are aware of the important use of French Military Intelligence or the Service de Documentation Extérieure et de Contre-Espionnage and you tend to contact them regularly. You hate to be ignored, interrupted or downplayed. Your opinion is important and you make sure that everyone knows it.

Views:

You believe that your country can never disarm all of their nuclear weapons. You feel that peace between superpowers can be contingent on mutually assured destruction, and that losing that disincentive could lead to a new World War.

You also believe that your country cannot allow other countries to develop nuclear weapons. You feel that additional proliferation to less developed nations will lead to global political instability. Additionally, the more widespread nuclear weapons are, you feel, the more likely a radical nation or extremist group could acquire one.

Due to your work regarding nuclear energy, you believe that the future of sustainable energy is with nuclear fusion and fission, and you believe that all countries should have access to this power, but not at the cost of that country obtaining nuclear arms.

Goals:

Your goal in this conference is to support the head diplomat and advise him in any military aspects of discussion that may arise.

Léon / Luce Noel
French Progressive Scientist
Description:

You were born in Rue Lamartine in Paris. Your parents were mainly of Polish and Jewish decent whose families escaped the Holocaust. While your early childhood was spend with your parents in London but you went with them across the English Channel and settled in Cherbourg. You learned how difficult it is to live in the lower class of society and you strived to break out and make money. You showed an extreme inclination towards mathematics and science but also natural history.

You attended the Lycée Condorcet where you won a prize for some of your scientific work and also you were published by 20 in the Annales de Mathématiques for your solution of a mathematical problem dealing with non-linear differential equations. You became relatively famous in the scientific community very quickly but decided to pursue a research project in the field of mechanical engineering.

You then decided to take various teaching appointments around the globe at vastly different educational institutions. You enjoyed the difference in culture and learned a lot about the way the world works and interacts. After many years of travel you decided to settle back down in your hometown of Cherbourg and begin working for the upper portions of the French government as a scientific advisor. You eventually catch the attention of the Prime Minister who chooses you to provide technical expertise to the other French representatives at the IAEA conference. You choose your battles carefully, staying out of conversation and debate until you are sure that you are in the right and you launch into an intense lecture of the true reality of the situation. You are also a good listener and quick to adapt to other people's attitudes, even abrasive ones.

Views:

You believe that your country can never disarm all of their nuclear weapons. You feel that peace between superpowers can be contingent on mutually assured destruction, and that losing that disincentive could lead to a new World War.

You also believe that your country cannot allow other countries to develop nuclear weapons. You feel that additional proliferation to less developed nations will lead to global political instability. Additionally, the more widespread nuclear weapons are, you feel, the more likely a radical nation or extremist group could acquire one.

Goals:

Your goal in this conference is to support the head diplomat and advise him in any scientific aspects of discussion that may arise.

Badrinath/ Bageshri Malek
Indian Head Diplomat

Description:

You grew up in Calcutta - one of the largest cities in India. In this place, you learned to speak your mind and how to get others to listen to you. You learned that these two things complement each other because when you speak your mind, people listen.

Your school career was not a great one. You did not excel in any scientific, technological or mathematical subject. You barely scraped by because you got fairly good grades in history and language classes. These were your favorite subjects and they catapulted you into Central Calcutta College where you attained a degree in history.

You spent your days afterward at the University of Calcutta where you taught history and foreign policy. Your teaching on foreign policy is what brought you to the attention of the Indian government. They offered you a position as a head diplomat to the IAEA special conference on halting nuclear proliferation.

This interested you because now you had a chance to put your great speaking and people skills to the test. You want to use your great knowledge of history and language to make your voice heard.

Views:

Most of your views are taken from lessons you have learned from history. Historically, nuclear weapons have ensured, ironically, that nuclear weapons cannot be used. The concept of MAD is a frightening one, but you think it keeps countries in line with their weapons. You think that nuclear weapons are not a danger unless one country has them and another country does not. This is the only time nuclear weapons will be used - when there is no chance of reprisal.

Goals:

Mutually assured destruction is a terrifying doctrine, but a functional one. However, it only functions if all involved nations are on equal nuclear footing. As a result, your government would like to see a push for equalization of nuclear stockpiles. Since your country is in the somewhat unique position of being "in the middle" with respect to nuclear development, you would like to see the larger world powers reduce their stockpiles, see smaller nations allowed to develop nuclear weapons for their own safety, and have the whole process public so no nation can secretly gain an advantage. You will try to give the IAEA the power to make this a reality.

Hemadri/ Harsha Parekh
Indian Chief Technical Advisor

Description:

You were born in Gah, Pakistan. Your family moved to India and your father was an entrepreneur. You watched your father build a business from the ground up and become a respected member of the community. He made a lot of money and made a great deal of investments in you. He sent you to the Lancaster University in the United Kingdom where you got a First Class Honours degree in Nuclear Engineering.

You returned home to your father and became a senior lecturer at the Indian Institute of Technology. You began to advise certain friends in government positions in the Ministry of Defense on their decisions when dealing with the issue of nuclear arms. They took your advice which proved to be useful and productive. It was they who convinced you to leave the university and work for the government.

After several years the Minister of Defense position opened up. The President of India recalled the dramatic changes and your determined attitude and offered you the position. You were skeptical if you were qualified, but the President insisted. You took the position and quickly learned all the necessary information to make well informed decisions. The President was confident of your aptitude to the task at hand and has asked you to represent the technical and military interests of India at the Special Assembly of the IAEA. The President feels that this will cement your knowledge of the Minster of Defense position as well as quell any fears you have remaining.

Views:

The best way to prevent the use of nuclear weapons is for nuclear weapons to not exist. Since this is clearly an impossibility, the next best thing, you feel, is for everyone to have them. The doctrine of mutually assured destruction will prevent their use.

Goals:

Your government's official push is for nuclear equality. Your job at this conference is to support your head diplomat and advise in technical matters that may arise during discussion.

Personally, you want your government to succeed in creating nuclear weapons because you believe it will give you power in the Middle East and across the globe. You also need to push nuclear powerhouse countries to disarm so that they do not have a huge weapons stockpile compared to that of your country.

Manishankar/ Manorama Vysetty
Indian Visionary Scientist

Description:

You group up in Cochin, India. You went to school there and immediately excelled in science and math. You showed great promise as you graduated first in your class from high school and then went on to attend the Cochin University of Science and Technology. Here you studied quantum mechanics. You spent many years studying quantum mechanics and finally received a PhD in the field.

During your college years, Indian research into nuclear weapons was beginning to gather steam. With your knowledge of particle and sub particles, you were the perfect candidate to become a nuclear scientist. You went to the Bhabha Atomic Research Centre where you worked on India's nuclear weapon program. Finally, enrichment was successful and the device to detonate the weapons was underway.

With the weapons created, you decided to retire and perhaps even try your hand in politics. You attempted to become the mayor of Cochrin, but it did not pan out. Instead you received attention from the Indian government. They saw that you were interested in politics and decided to offer you a position as the scientific advisor to one of India's head diplomats. This is where you are today.

Views:

You believe that your country should have the means to develop and create nuclear weapons. You also believe that the countries that already have nuclear weapons should have to disarm before they can begin to suggest what your country should do with its own nuclear weapons program.

You also believe that nuclear energy is the best and cleanest solution for the future of power in India as the country continues its rapid development.

Goals:

Your government's official push is for nuclear equality. Your job at this conference is to support your head diplomat and advise in scientific matters that may arise during discussion.

Jaffar/ Jehan Salahuddin
Pakistani Head Diplomat

Description:

You grew up in a small town in Pakistan. You wanted to make a good life for yourself, so you studied hard through all of your school years. You made a good impression on all of your teachers simply because that is your way. You were a great public speaker and a great friend to nearly anyone you met. You were seen as a good person by your teachers and schoolmates simply because you are always in a pleasant mood.

Since you were such a good speaker and everyone seemed to support you, you decided to run for a public office. You became mayor of that small town that you grew up in. You took a firm stance on every issue that came your way, but that stance was always influenced by what the people wanted. What others wanted is what you did and stuck to it.

The Pakistani Government saw how you well you were doing with the small town and decided to offer you a post as a diplomat for their government. Your first assignment for them is to go to the special conference of the IAEA and fight for the rights of Pakistan. Of course you will fight for them because that is what you always do.

Views:

Most of your views are taken from lessons you have learned from history. Historically nuclear weapons have ensured, ironically, that nuclear weapons cannot be used. The concept of MAD is a frightening one, but you think it keeps countries in line with their weapons. You think that nuclear weapons are not a danger unless one country has them and another country does not. This is the only time nuclear weapons will be used; when there is no chance of reprisal.

Goals:

Your goals at this special conference are to maintain the nuclear arms of your country while getting the large nuclear powers to begin to disarm their vast stockpiles of nuclear weapons. You also do not want nuclear developing countries to be completely stopped although you would like to see some limitations imposed on them. Since you are in a unique position of have weapons and still attempting to develop more and better weapons, you will try to create a compromise between large powers and developing countries. You want to see the large countries reduce their huge stockpiles and at the same time see limitations put on developing countries so that they cannot secretly develop stockpiles.

Tamonash /Tanmaya Barakzai
Pakistani Chief Military Advisor

Description:

You were born in Daryaganj in Delhi, India. Your family immigrated to Pakistan and settled in Karachi. Your father was a diplomatic clerk and you were raised in a middle class environment. You saw the need for balance in life at an early age and your father was your hero. He often worked long hours to keep you in school and support your family. You attended Saint Patrick's High School in Karachi and attended the Forman Christian College in Lahore.

When you got out of college you had a hard time deciding what to do. After a short period of indecision you decided to join the military and entered the Pakistan Military Academy at Kakul. You continued your military education at the Royal College of Defence Studies in the United Kingdom, as well as the National Defense College in Rawalpindi.

You commanded an artillery regiment for many years. There was several tense situations with India and even one with China but you never saw combat. You were promoted to Company Commander of the Special Services Group (SSG). You later took the post of Infantry Division Commander. The Prime Minister pulled you ahead of other senior officers as the Chief of Army Staff position opened up due to a resignation.

In this position, though largely administrative, you took the training of the SSG commandos personally and created one of the finest groups of its kind in the world. The Prime Minister, a close personal friend and ally, has asked you personally to attend the Special Assembly of the IAEA and represent Pakistan military interests.

Views:

Most of your views are taken from lessons you have learned from history. Historically nuclear weapons have ensured, ironically, that nuclear weapons cannot be used. The concept of MAD is a frightening one, but you think it keeps countries in line with their weapons. You think that nuclear weapons are not a danger unless one country has them and another country does not. This is the only time nuclear weapons will be used - when there is no chance of reprisal.

Goals:

Your job at this conference is to advise the head diplomat in matters pertaining to military discussion.

Farook/ Massima Elahi
Pakistani Technical Advisor

Description:

You grew up in one of the greatest times in the history of your country. You were schooled by some of the greatest scientific minds that your nation has every seen. Like any scientist, you excelled in the sciences. You went to school to be a chemist and graduated with a PhD in the field.

During this time nuclear development was underway in Pakistan and although you were not a nuclear physicist you knew enough about the atom to begin research for a local Pakistani laboratory.

This laboratory was run by a man called A.Q. Khan. During your time at the laboratory you learned much about nuclear weapons and became a key figure in creating them for your country. Your knowledge of nuclear enrichment, weapons and power is of the top tier in you country.

After Khan was found to be selling nuclear secrets to other countries you decided to retire from being a scientist because you did not think nuclear weapons should be spread in such a way. Knowing your position on the matter your government has selected you to be the scientific advisor to a delegation which will be convening to discuss the IAEA and nuclear proliferation.

Views:

You believe that your country should have the means to develop and create nuclear weapons. You also feel that all countries that follow the religion of Islam should the ability to develop their own bomb.

You also believe that the countries that already have nuclear weapons should have to disarm before they can begin to suggest what your country should do with its own nuclear weapons program. You will attempt to disguise your nuclear program as just a program for power and not for weapons because you know how the rest of the world would react.

Goals:

Your job at this conference is to advise the head diplomat in matters pertaining to scientific discussion.

Viktor/Veronika Dosteyev
Russian Head Diplomat

Description:

Hardship began early in your life. You were born and immediately lost the person who loved you most in the world. As you were growing up, you felt the weight of this loss bear on your shoulders and found it very difficult to make friends in the orphanage. Luckily, you simply directed all of your energy into schoolwork and received a full scholarship and admittance into Oxford.

When you were accepted you decided to attain your law degree. Now that you are becoming successful you find it easier to relate to the other students in the college and begin making friends. You love the English people and their ways.

After you receive your law degree, you decide to go back to Russia and defend people who can not defend themselves. It is your way of saving the people who you easily could have become yourself.

Nuclear weapons begin to interest you because you know that Russia or the US could easily trigger the mass annihilation of the human race. You attempt to become mayor of Vladivostok in order to make the city a better place and help out the innocent. You lose by a small margin, but you catch the eye of a influential man.

Vladimir Putin supported you through your campaign though you did not know it. He agreed with your ideas. He arranges a meeting with you and you have a long and insightful conversation with him. He decides to make you his advisor on nuclear affairs. When he eventually becomes president, he appoints you to be his head diplomat on nuclear affairs to the UN and the IAEA.

Views:

You believe that your country can never disarm all of their nuclear weapons. You believe that peace between superpowers can be contingent on mutually assured destruction and that if disarmament occurs world war may again break out.

You also believe that your country cannot have other countries developing nuclear weapons. When more nations create nuclear weapons then the stability of the world may break down. If a radical nation gets a nuclear weapon it may actually use it or an Islam bomb may be given to radical extremist groups.

Goals:

- Disarm Small Nations
- Prevent Disarmament of your country.

Oleg / Olga Dimitrinoff
Russian Military Advisor

Description:

You grew up as a boy in the Soviet Union under the Cold War. You quickly became engulfed in the Soviet Union military. In order to beat the United States, you had to become very involved in your job. You were one of the greatest men in the military during the Cold War, but lost some respect when the Cold War ended and nuclear weapons were no longer a hot topic. Your most recent occupation was working security in Baikonur, a city in Kazakhstan rented by the Russian government as a cosmodrome. While stationed here you became good friends with many scientists who took great interest in how technology will progress into the future, particularly that of space exploration.

Though your standing in the Russian government diminished some when the Cold War ended, key members of the Russian government now see you as a great asset in diplomacy. You grew up with nuclear weapons and learned many military advantages and disadvantages of these weapons. You know what they can bring to a country and at the same time what they can take away.

You have regained the respect you once garnered and now you are seen as a key advisor in anything to do with nuclear arms. You are one of the highest authorities in the world on the Russian military and its nuclear weapons. You always voice your opinion on any military benefit of nuclear weapons to Russia.

Views:

You believe that your country can never disarm all of their nuclear weapons. You believe that peace between superpowers can be contingent on mutually assured destruction and that if disarmament occurs world war may again break out.

You also believe that your country cannot have other countries developing nuclear weapons. When more nations create nuclear weapons then the stability of the world may break down. If a radical nation gets a nuclear weapon it may actually use it or an Islam bomb may be given to radical extremist groups.

Goals:

Your goal in this conference is to advise your delegation on matters pertaining to miltary discussion. You also want to leave the door open to the development of nuclear technology for the future, whether it be military, civilian, or for space exploration.

Boris/ Natalia Oromuv
Russian Technical Advisor

Description:

You are a hot shot scientist who has quickly worked his way up from the bottom of the scientific world, up to the top. You went to a very prestigious college in the United States called Yale. From there you began work at CERN laboratories in Europe.

You were very quick to move your way up the latter at this research institute and became highly regarded by your peers. Russian intelligence took note of this and recently you were offered a position as the chief scientific advisor to the president of Russia.

This was great news to you, but there was a small catch. First, you need to be the scientific advisor to a delegation which is heading to a special conference of the IAEA. Although this is not the best job for your skills and knowledge you begrudgingly accept because you want that chief advisor position.

Now it looks like it is off to the conference. It seems like it will be a terribly boring and uneventful time in a room full of dusty old dinosaurs who can't get anything done.

Views:

You believe that your country can never disarm all of their nuclear weapons. You believe that peace between superpowers can be contingent on mutually assured destruction and that if disarmament occurs world war may again break out.

You also believe that your country cannot have other countries developing nuclear weapons. When more nations create nuclear weapons then the stability of the world may break down. If a radical nation gets a nuclear weapon it may actually use it or an Islam bomb may be given to radical extremist groups.

Goals:

Your goal in this conference is to advise your delegation on matters pertaining to scientific discussion.

Dimitri / Vladia Chezkoff
Russian Visionary Scientist

Description:

You grew up when the Soviet Union was by far one of the most respected and feared countries in the world. In your time everyone thought that the Soviet Union was a military and spacefaring powerhouse. This was until the Soviet Union just completely collapsed.

The most hated part of your career as a chief advisor to the Soviet space administration was the collapse of the USSR. With the collapse you saw everything you worked for disappear in a short span of time. Your work was on the cutting edge of technology, and you were only a few months from putting a Soviet on the moon. Struggling to find a job, you managed to find an opening in the United States working with NASA. You were disappointed with the job because you were never trusted, even though your insight and contributions were among the best in the administration. Nonetheless, you remained part the administration for close to a decade. The crowning achievement of your work was developing the necessary foundation for the proposals to use nuclear power in settlements on the lunar surface.

Upon your return to Russia, you were immediately recognized by many government officials and appointed to advise the head diplomat to the IAEA of your country. As his advisor you will continue to be optimistic and tell him that the future of energy is nuclear energy.

Views:

You believe that your country can never disarm all of their nuclear weapons. You believe that peace between superpowers can be contingent on mutually assured destruction and that if disarmament occurs world war may again break out.

You also believe that your country cannot have other countries developing nuclear weapons. When more nations create nuclear weapons then the stability of the world may break down. If a radical nation gets a nuclear weapon it may actually use it or an Islam bomb may be given to radical extremist groups.

Though you do not believe other countries should be developing weapons technology, you believe that countries should be allowed to finance research into nuclear energy.

Goals:

Your goal in this conference is to advise your delegation on technical matters.

Gwembeshe/ Gbemisola Meikle
South African Head Diplomat

Description:

You were born in the Eastern Cape province of South Africa. Your father was a member of the African National Congress and the South African Communist Party. Both your parents were teachers and anti-apartheid activists. You went to high school at Lovedale. Your father pushed for you to become extremely well educated and politically active.

You obliged your father by studying abroad. You studied at the University of Sussex in the United Kingdom earning a degree in Economics, as well as Russia and the United States. At the University of Sussex you met your friend and colleague Baako Seralina. Around this time, your father passed away. You took it upon yourself to continue his legacy and take his advice. You returned home, joined the African National Congress and became the head of the ANC's information department and international affairs department. As a member of the international department you worked to solidify relations with Zimbabwe and help there ailing economy.

You succeeded and earned the respect of many South African and Zimbabwe officials. You choose to take the offered position of Minister of Foreign Affairs. You continued to receive support from Zimbabwe and from within your own government. The praise from your colleagues caught the attention of the President of South Africa. The President has asked you to represent South Africa in a Special Assembly of the IAEA. You are extremely tolerant and accepting of different races and beliefs. You practice patience in debate. You tend to let people that disagree with you make mistakes that serve your means rather then attack them directly. You command respect from the people that know you but your quest to take the higher road sometimes agitates opposing parties.

Views:

Most of your views are taken from lessons you have learned from history. Historically nuclear weapons have ensured, ironically, that nuclear weapons cannot be used. The concept of MAD is a frightening one, but you think it keeps countries in line with their weapons. You think that nuclear weapons are not a danger unless one country has them and another country does not. This is the only time nuclear weapons will be used; when there is no chance of reprisal.

Goals:

Your goals at this special conference are to maintain the nuclear arms of your country while getting the large nuclear powers to begin to disarm their vast stockpiles of nuclear weapons. You also do not want nuclear developing countries to be completely stopped although you would like to see some limitations imposed on them. Since you are in a unique position of have weapons and still attempting to develop more and better weapons, you will try to create a compromise between large powers and developing countries. You want to see the large countries reduce their huge stockpiles and at the same time see limitations put on developing countries so that they cannot secretly develop stockpiles.

Qinisela /Qhikiza D'Ewes
South African Military Advisor

Description:

You were born in Matatiele, KwaZulu-Natal to a small family of dairy farmers. You mother and father were both simple people with little education. You attended Emma Farm School and went to Mariazel High School in your hometown. You do reasonably well and attended St. Francis College in Marianhill and the University of the North where you enrolled for a social science degree.

In college, you became a larger supporter of the South African Student' Organization which is aligned with the African National Congress (ANC). This got you into a lot of trouble because of its sometimes controversial activities. Seeing that your life was going down a dangerous road you took action. You entered the South African National Defense Force (SANDF) where you took part in many campaigns including missions in the Democratic Republic of the Congo and Lesotho as well as many UN peacekeeping task forces.

You entered the SANDF as an officer and quickly rose higher in rank. You learned of and are currently aware of the nuclear weapons program that South Africa started in the 1970s but dismantled in the 1990s. You agreed with the South African government's decision to voluntarily dismantle its nuclear weapons arsenal. You view nuclear weapons as an abomination and a complete divergence from conventional weapons and traditional combat.

When you left the SANDF you called upon old friends in the ANC to help you win a position in the government. You were elected the premier of the Free State province. A few years later you were promoted the chairperson of the National Council of Provinces. Your political and military career caught the eye of the President of South Africa. The President has granted you the position of the Minster of Defense of South Africa and asked you to attend the Special Assembly of the IAEA and to represent South African military interests.

Views:

Most of your views are taken from lessons you have learned from history. Historically nuclear weapons have ensured, ironically, that nuclear weapons cannot be used. The concept of MAD is a frightening one, but you think it keeps countries in line with their weapons. You think that nuclear weapons are not a danger unless one country has them and another country does not. This is the only time nuclear weapons will be used; when there is no chance of reprisal.

Goals:

Your goal in this conference is to advise your delegation on matters pertaining to military discussion

Zuberi/Zulu Lehmkuhl
South African Visionary Scientist

Description:

You were born in Tzaneen in the Limpopo Province. You father was a biologist who studied the wildlife in the tropical and subtropical regions surrounding your home. Your mother was a teacher at a local school. You parents both stressed education at an early age but you were deeply in love with your village and the environment and did not wish to stray far from home.

You enrolled in Hebron Training College gained a BSc in Physics and an MSc in Applied Mathematics. You took an opportunity to teach at the University of Zululand. Several years later you left Africa completely to study in Germany and France gaining a doctorate degree in Physics.

Your research center mostly around nanoscale physics which you performed at the University of Birmingham in the United Kingdom. You continued to keep in touch with your parents and you were often home sick. You decided to travel home and change focus to astronomy. You studied deep space physics and worked for the National Research Foundation of South Africa at the South African Astronomical Observatory in Sutherland.

Continued discussion with your mother and father got you active in politics. Your father happened to be old friends with the President of South Africa who got you the position of Minister of Education and then soon after the Minister of Science and Technology. Your personal connection and research has the attention of the President of South Africa. The President has asked you to advise and represent the scientific community of South Africa at the Special Assembly of the IAEA.

Views:

You believe that your country should have the means to develop and create nuclear weapons. You also believe that the countries that already have nuclear weapons should have to disarm before they can begin to suggest what your country should do with its own nuclear weapons program. You will attempt to disguise your nuclear program as just a program for power and not for weapons because you know how the rest of the world would react.

Goals:

Your goal in this conference is to advise your delegation about matters pertaining to scientific discussion.

Baako Seralina
South African Diplomat

Description:

You were born in Hanover in the Northern Cape province of South Africa. Your family was large and composed primarily of mineworkers. Your father was active in the National Union of Mineworkers and you grew up around gold and uranium mining men. Unlike your family, you were extremely driven to attain an education. You worked extremely hard in the Vaal Reefs mine to finance this education.

After your hard work paid of, your family pulled what few strings they had to land you a job in the Congress of South African Trade Unions. You started as a clerk but worked your way up to regional secretary before departing South Africa entirely to study economics at the University of Sussex in the United Kingdom where you met (Gwembeshe/ Gbemisola) Meikle. After working briefly in several small companies in the United Kingdom you returned to South Africa and joined the African National Congress (ANC). You kept your eye on the Ministry of Finance position trying to use the ANC as a means to launch yourself into such high office. However, you became extremely critical of some of the ANC's policies and left the ANC. You were picked up but the Congress of South African Trade Unions as a sponsor and they supported you in your campaign for Finance Minister which you won. As Finance Minister you reformed a great many policies within the South African government, weeding out corruption and increasing the wealth of the nation.

Your fall and return to political power as well as your relationship with (Gwembeshe/ Gbemisola) Meikle caught the eye of the South African President. The President has asked you to assist with representing the diplomatic interests of South African at the Special Assembly of the IAEA. You are extremely confident but you exercise self control when wanting to speak of controversial matters. Your tenacity and stamina when you are the center of attention is something that many of your fellow delegates admire. You recognize the necessity of support and alliances. You rarely disagree with delegates that share your views and are very cautious when disagreeing with your fellow delegates.

Views:

Most of your views are taken from lessons you have learned from history. Historically nuclear weapons have ensured, ironically, that nuclear weapons cannot be used. The concept of MAD is a frightening one, but you think it keeps countries in line with their weapons. You think that nuclear weapons are not a danger unless one country has them and another country does not. This is the only time nuclear weapons will be used; when there is no chance of reprisal.

Goals:

Your goals at this special conference are to maintain the nuclear arms of your country while getting the large nuclear powers to begin to disarm their vast stockpiles of nuclear weapons. You also do not want nuclear developing countries to be completely stopped although you would like to see some limitations imposed on them. Since you are in a unique position of have weapons and still attempting to develop more and better weapons, you will try to create a compromise between large powers and developing countries. You want to see the large countries reduce their huge stockpiles and at the same time see limitations put on developing countries so that they cannot secretly develop stockpiles.

John / Jane Hammond
United Kingdom Head Diplomat

Description:

You were born in Edinburgh, Scotland. Your father was the child of two atheist Irish actors and your mother came from a long line of traditional Catholic Englishmen. Religion was often an intense subject of debate in your home and you never got involved but did listen too much of what your parents had to say. Your father was attempting to get a law degree and your mother was a tax inspector for the government.

You moved to Durham, England were you attended Oxford at St. John's College where you taught yourself law and then Cambridge where you studied foreign policy and international relations. You entered politics immediately by joining the Labour Party and representing the constituency of the cities of London and Westminster in the House of Commons of the Parliament of the United Kingdom.

You publicly supported unilateral nuclear disarmament but you later rethought your position. You also spoke publicly against the 'closed shop' practice of some businesses as the Shadow Cabinet's Secretary of Employment. After several terms in that role where you made several controversial and influential changes to the Labour Party's policy, you ran for the leader of the Labour Party which you won narrowly.

However, your influence and rise in politics caught the eye of the Prime Minister who has asked you to represent the United Kingdom in the Special Assembly of the IAEA. You are new to this international stage but you do not fear it. You are confident in your country and your knowledge and you did not like to be outspoken. Many of your colleagues find to rude and annoying at some of your interjections but you feel that you are bringing important truths and insights to the table.

Views:

You believe that your country can never disarm all of their nuclear weapons. You believe that peace between superpowers can be contingent on mutually assured destruction and that if disarmament occurs world war may again break out.

You also believe that your country cannot have other countries developing nuclear weapons. When more nations create nuclear weapons then the stability of the world may break down. If a radical nation gets a nuclear weapon it may actually use it or an Islam bomb may be given to radical extremist groups.

Goals:

You will try to give the IAEA powers to make developing countries give up their weapons or at the very least suspend their creation of more nuclear weapons. You will also try to give the IAEA powers to prevent all other countries from developing a bomb. You want to get this done without having your country totally disarm.

John / Jane MacGregor
United Kingdom Head Technical Advisor

Description:

You were raised in an only child in a small town outside of Carlisle. Your mother passed away very early in your life and you become very close to your father. As a child you did not care much for school but enjoyed the mountains and the outdoors. Your father taught you many traditional skills and values including hunting, some farming and a somewhat extreme form of patriotism.

You wanted to go straight into the military but your father pushed you in school and you to attend the Technology School at Cambridge University. Your father's pride and your personal sense of patriotism allow the making of serious intellectual gains. College affirms your sense of patriotism and you enter the British military. You accelerate through the ranks of the military using a sharp wit and a complete and total hatred for skirting issues. You attack every problem head on and are rarely concerned with finding easier solutions when there is one solution clear to you.

The majority of your military career is spent in the Land Command but as your career progress you spend time as a command element in the Royal Air Force, MI5 and MI6. You soon find yourself in a high position in the Ministry of Defence where you become close friends of the Minister of Defence as well as the Prime Minister as their advisor on nuclear arms.

You are admired for your ability to seek and attack problems without warning or concern. This drive sometimes gets you in trouble because of the implications of your direct action and your aggressive methods. You are however chosen to represent the Ministry of Defence's interests at the IAEA special assembly. It is your first appearance on this global platform but you're quite confident. You respect everyone in discussion but are quick to use aggressive and direct measures when it comes to private meetings and conversations.

Views:

You believe that your country can never disarm all of their nuclear weapons. You believe that peace between superpowers can be contingent on mutually assured destruction and that if disarmament occurs world war may again break out.

You also believe that your country cannot have other countries developing nuclear weapons. When more nations create nuclear weapons then the stability of the world may break down. If a radical nation gets a nuclear weapon it may actually use it or an Islam bomb may be given to radical extremist groups.

Goals:

Your goal in this conference is to advise your delegation on matters pertaining to military discussion.

Rupert / Rachel Mansfield
United Kingdom Visionary Scientist

Description:

You were born in North London. Your father was a research biologist and your mother was a Polish immigrant. You were the youngest of four children where you were favored the most by your parents. Your family moved to Oxford shortly after you were born because of a research opportunity for your father. You bonded very closely with your mother whom you saw the most. Your father did not spend much time at home though you admired him. Your father tried to get you into the field of biology and natural science but you did not enjoy the field. Instead you took an interest in pure mathematics and physics.

You enrolled in University College at Oxford studying mathematics and physics. After graduating you took a research opportunity to study sunspots but decided that you did not like studying things that you could not see very accurately and instead turned your attention to atomic physics and quantum mechanics. You were published in the Bulletin of Atomic Scientists and later became a member of the Board of Sponsors. You did intense work on atomic physics but later went on to research fusion with the Joint European Torus (JET) at United Kingdom Atomic Energy Association (UKAEA) and European Union (EU) laboratory. You made significant improvements to the JET design and operation, published several papers on the project and caught the eye of the public and the scientific community.

You were inducted as one of the youngest Fellows to the Royal Society. The Prime Minister chose you to represent the United Kingdom in the IAEA Special Assembly because of your research relevance and because of your recent successes. You feel very comfortable with discussing and collaborating with other countries delegates because of your experience with the EU and UKAEA JET project. You become agitated by imprecise and assumed values but you rarely speak out against them. You find it easier to relate and confer with the members of other delegations then with your own.

Views:

You believe that your country can never disarm all of their nuclear weapons. You believe that peace between superpowers can be contingent on mutually assured destruction and that if disarmament occurs world war may again break out.

You also believe that your country cannot have other countries developing nuclear weapons. When more nations create nuclear weapons then the stability of the world may break down. If a radical nation gets a nuclear weapon it may actually use it or an Islam bomb may be given to radical extremist groups.

Your work on nuclear fusion has convinced you that it is the ultimate form of power for the future, and you feel that any attempt to limit the work on development of nuclear energy technology will be a detriment to the human race.

Goals:

Your goal in this conference is to advise your delegation in matters pertaining to scientific discussion.

Mitchell / Michelle Townes
United States Head Diplomat

Description:

You grew up in the suburbs of New York City. In order to grow up in such a bustling place you needed to be loud and be able to get yourself heard by your peers. You excelled at learning in all of its forms. You graduated at the top of your class in high school and since you did so well you were accepted to Harvard University.

At Harvard you study political science and again you learned very quickly and again graduated in the top tier of your class. You were a whiz with relations and could get nearly anyone to see your point of view and even get some opponents to subscribe to your ideas.

This was noted when you were working in the Whitehouse as an intern. The people there saw how great a speaker you were and how patriotic you were. They knew you would never betray your country and would stand up for its ideals. This is why you became their head diplomat to the IAEA in 1997. Now you are a veteran of the IAEA conferences and are looking forward to the special conference in which you can represent your country.

Views:

You believe that your country can never disarm all of their nuclear weapons. You believe that peace between superpowers can be contingent on mutually assured destruction and that if disarmament occurs world war may again break out.

You also believe that your country cannot have other countries developing nuclear weapons. When more nations create nuclear weapons then the stability of the world may break down. If a radical nation gets a nuclear weapon it may actually use it or an Islam bomb may be given to radical extremist groups.

Goals:

Your goal in this conference is to gain the nuclear disarmament of all other nations. This does not include the US.

Michael/ Michelle Roberts
United States Chief Military Advisor

Description:

You were born in Pawtucket, Rhode Island. You were raised in an upper class family. Your father was a wealthy engineer and your mother ran a successful advertising company. Your parents taught you how to confront your problems and how to face your fears. You attended Bishop Keough Regional High School where you got excellent marks. Your family used its limited influence to United States Military Academy at West Point, New York.

After graduating you were taken under the wing of a General Dwight in charge of a military base in the Middle East. General Dwight taught you a great many things about the Middle East as well as military history and theory. He became your mentor and you maintain contact with him to this day.

You left the Middle East to attend the Command and General Staff College at Fort Leavenworth, Kansas. You education there cemented what General Dwight had taught you and you felt yourself ready for any situation. You went on to serve as a battalion commander at Fort Benning, Georgia.

You served under many other generals, taking the training of their troops as personal task. However, you sustained a bad injury to your left knee during a training accident. You considered retirement before taking a staff position in Washington, D.C.

You served on the General Staff in Washington for many presidential terms and you worked in close proximity with the Department of Defense. The current president sees your experience and hands-on approach to be an invaluable asset and has asked you to represent the military interests of the United States at the Special Assembly of the IAEA.

Views:

You believe that your country can never disarm all of their nuclear weapons. You believe that peace between superpowers can be contingent on mutually assured destruction and that if disarmament occurs world war may again break out.

You also believe that your country cannot have other countries developing nuclear weapons. When more nations create nuclear weapons then the stability of the world may break down. If a radical nation gets a nuclear weapon it may actually use it or an Islam bomb may be given to radical extremist groups.

Goals:

Your goal in this conference is to advise your delegation on matters pertaining to military discussion.

Tobias/ Anne Owens
United States Technology Advisor

Description:

From early childhood you always thought you knew more than anyone else. This confidence, or perhaps arrogance, has served you well in life. You were top of your class in high school and excelled at any class that had to do with science or technology. This knowledge and love for science boosted your grades to extraordinary levels and attained you admittance into Princeton University where you study nuclear physics and quantum theory.

Again you were one of the brightest minds at the school and turned quite a few heads with how quick you caught on and the sheer amount of material you learned about nuclear physics.

After you graduated with a PhD in nuclear physics and quantum mechanics you received a job at the coveted Los Alamos National Laboratory. Although the lab has been around since American nuclear experimentation began it is still a thriving hub of knowledge and research. You become a senior scientist at the laboratory and this position comes with quite a lot of respect. You garner so much respect that when the United States was looking to send a science advisor to a nuclear conference they chose you.

Views:

You believe that your country can never disarm all of their nuclear weapons. You believe that peace between superpowers can be contingent on mutually assured destruction and that if disarmament occurs world war may again break out.

You also believe that your country cannot have other countries developing nuclear weapons. When more nations create nuclear weapons then the stability of the world may break down. If a radical nation gets a nuclear weapon it may actually use it or an Islam bomb may be given to radical extremist groups.

Goals:

Your goal in this conference is to advise your delegation on matters pertaining to scientific discussion.

Joshua/ Samantha Lane
United States Visionary Scientist

Description:

You were born in the small town of Waterville, Maine. Your father was a union paper worker and a police officer and your mother was an administrative clerk. Your father taught you the meaning of hard work and your mother taught you how to be polite and personable. You attended Waterville High School, got high marks and attended the Massachusetts Institute of Technology where you enrolled in the Sloan School of Management.

After college you desired to stay close to home but there was little job openings so you moved to Washington, D.C. where began working as a civil servant performing the duties of a diplomatic clerk. Your devotion to your job and your education allowed you to rise quickly through a serious of promotions. After you felt like you had no more opportunities to rise you left government service to work in the private industry. After you had managed to make a lot of powerful friends and a lot of money you returned to government service as Special Assistant to the current President of the United States.

You proceeded to advise the President on a great many issues including foreign policy and the economy. You took a personal interest in the huge federal deficit and advised the President intensively on ways to bring the deficit down. Your ideas proved effective and the President found himself in great favor. The President has asked you to attend the Special Assembly of the IAEA to represent the United States financial interests.

Views:

You believe that your country can never disarm all of their nuclear weapons. You believe that peace between superpowers can be contingent on mutually assured destruction and that if disarmament occurs world war may again break out.

You also believe that your country cannot have other countries developing nuclear weapons. When more nations create nuclear weapons then the stability of the world may break down. If a radical nation gets a nuclear weapon it may actually use it or an Islam bomb may be given to radical extremist groups.

Goals:

Your goal in this conference is to advise your delegation on all topics of which you have knowledge.

Kim Jungwon
North Korea Visionary Scientist

Description:

You born in Seoul and your parents are both natives of Pyongyang. Your parents have always lived poor, barely getting by. Both were somewhat self-educated but were barely able to read. You respected your parents for working hard and getting by throughout your child despite the fact that you lived on the edge of poverty and malnutrition. You knew early on that you wanted to get out of poverty and get an education so you made your whole focus on your childhood education.

You were not particularly gifted in mathematics and science but you tried very hard and got excellent grades. You were eventually accepted into the Massachusetts Institute of Technology where you got your doctorate in computer science doing your thesis on quantum computing and nanotechnology. You lectured for many years as a professor of computer science. You returned to North Korea and entered a professorship at Kimchaek Polythenic University, it was here you became friends with Lee Sungjoo. You continued your work on quantum computing and eventually received the Wolf Prize for you international studies in the field.

At the urging of your colleague, you have been chosen to represent North Korea at the IAEA Special Assembly because of your knowledge of physics and your international experience. You are confident and proud of your life and feel secure in your abilities. You feel that you are one of the best educated people at the Assembly, a mentality that is sometimes exposed in discussion.

Views:

Mutually assured destruction works, when all nations can be assumed to be reasonable, and reasonable people can be assumed to be in charge of the government. You believe most government powers see how foolish it would be to launch a full nuclear strike. You believe that your country should be allowed to have its own stockpile of arms in order to be part of the international balance.

Goals:

Your job at this conference is to advise the head diplomat in matters pertaining to scientific discussion.

Park Seungho
North Korean Head Diplomat

Description:

You were born in a small town outside of Pyongyang. Your parents were immigrants who escaped from Russia and Ukraine before finding refuge in northern China. They eventually left China and came to North Korea after the war to help be a part of the new Communist state.

Your family was often treated differently because if it's particular religious views which tended to differ with that of the Korean Social Democratic Party. Your parents were vocal and active political figures.

You joined the Korean People's Army but suffered a serious injury that has not healed correctly and you were discharged before your service was officially over. After attending Columbia University in the United States, you returned to Pyongyang and opened up a law practice. However, you grew bored and joined the legislative branch of the government. You served as a member of many committees including the Foreign Affairs and Security committees.

Serving many years at this post the current Prime Minister asked you to represent North Korea at the IAEA special assembly. You are a fierce and determined diplomat; you do not stand down from what you think is right. You believe that a well defended difference of opinion is something to be respected, but you have little tolerance for ignorance of the subject at hand and disrespect when it comes to diplomatic discussions.

Views:

Mutually assured destruction works, when all nations can be assumed to be reasonable, and reasonable people can be assumed to be in charge of the government. You believe most government powers see how foolish it would be to launch a full nuclear strike.

Goals:

North Korea's nuclear capabilities must be maintained as a deterrent to Western nations that would like nothing more than to eliminate North Korea from the map and reunite it with South Korea.

Lee Sungjoo
North Korea Chief Technical Advisor

Description:

You grew up in the capital city of Pyongyang and like most people in North Korea you were very interested in science and technology because you believe it is a way to enhance your country. In grade school you did very well in mathematics and in secondary school you found a great love for physics. You transferred this love over to college.

You went to Kimchaek Polythenic University. Here you took physics classes that pertained to nuclear power. You enjoyed them very much and in no time at all you had your PhD in nuclear physics. Since you went to a school focusing on technology you were very interested in creating machines that could begin to enrich uranium up to a grade that can be used for power.

This focus on enrichment technology is what landed you a job in a top secret North Korean facility that was dedicated to the North Korean nuclear program. Here you worked on attempting to enrich uranium, but most of the scientists at the facility found it near impossible to create. The facility obtained information about the devices from Pakistan from sources that are unknown to you.

You have begun to suspect that the enrichment process you are working on will be further so that weapons grade material can be produced. You brought this up with your manager and he did not deny your claims. He then told you the government was looking for a scientific advisor for an upcoming special assembly of the IAEA. You gladly accepted, but were told to keep quiet about the facility and weapons.

Views:

You believe that your country should have the means to develop and create nuclear weapons. You believe it is essential for your country to have nuclear arms in order to balance the threat from western powers like the United States.

You also believe that the countries that already have nuclear weapons should have to disarm before they can begin to suggest what your country should do with its own nuclear weapons program. You will attempt to disguise your nuclear program as just a program for power and not for weapons because you know how the rest of the world would react.

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Goals:

Your role is to support your head diplomat and advise in scientific matters relevant to current discussion points.

Personally, you want your government to succeed in creating nuclear weapons because you believe it will give you power across the globe. You also need to push nuclear powerhouse countries to disarm so that they do not have a huge weapons stockpile compared to that of your country. You also do not mind if other countries develop nuclear weapons because it is a natural way to balance the power of the nations.

Franz Köhler
Germany Head Diplomat

Description:

You were born and raised in Berlin. Both of your parents mother are part of a large family of wealthy businessman and venture capitalists. You are the oldest of 3 children, and many of your early skills of negotiation developed from settling disputes between your siblings. You were quite a troublemaker in your youth but you took advantage of your family's political position and your own personal ability of talking yourself out of a corner.

You were educated at Harvard University Law School in the United States, and decided to enter civil service after graduation. After various low level civil servants jobs, you begin to rise quickly through the ranks and catch the eye of the current President. The President appointed you head of his staff, a post that you did not enjoy but remained in for 4 years. You then spent 2 years as a member of the Federal Convention as representative to Berlin.

You were then offered the post of head of Ministry of Agriculture and Rural Development. You antagonized other countries for there conflicting policies against your own and scrutinized heavily the current policies of your administration. You make heavy changes that have a significant effect on the farming community.

The Prime Minister chooses you to attend the meeting of the IAEA for your negotiating skills, your ability to defuse a situation but also your ability to shake things up. You are known by your peers for a superior ability to cut through the clutter right to heart of the problem.

Views:

You believe that your country can never disarm all of their nuclear weapons. You feel that peace between superpowers can be contingent on mutually assured destruction, and that losing that disincentive could lead to a new World War.

You also believe that your country cannot allow other countries to develop nuclear weapons. You feel that additional proliferation to less developed nations will lead to global political instability. Additionally, the more widespread nuclear weapons are, you feel, the more likely a radical nation or extremist group could acquire one.

Goals:

Mutually assured destruction is a functional doctrine, but as more and more countries acquire nuclear weapons, the chances of a rogue nation eschewing it increase. As a result, your government wants countries currently developing nuclear weaponry to cease additional development. Additionally, it would like to see no new nations develop nuclear weapons. Your goal at this conference is to espouse this viewpoint and give the IAEA the powers necessary to make it a reality.

Freidrich Huldorf
German Chief Technical Advisor

Description:

You were born in Munich, Germany. You watched your father build a business from the ground up and become a respected member of the community. He made a lot of money and made a great deal of investments in you. He sent you to the Massachusetts Institute of Technology, where you graduated top in your class with a degree in nuclear physics. After completing your doctorate you did a brief internship at the MIT Lincoln Laboratory, but left after a few months after receiving a job offer from the European Organization for Nuclear Research (CERN).

While at CERN you made leading contributions to major breakthroughs in the particle physics field, and you became a leading advisor for the Large Hadron Collider project. You worked at CERN for 10 years before the German government took notice of your accomplishments and honored you in front of the national assembly.

The President was confident of your aptitude to the task at hand and has asked you to represent the technical interests of Germany at the Special Assembly of the IAEA.

Views:

The best way to prevent the use of nuclear weapons is for nuclear weapons to not exist, your country cannot allow other countries to develop nuclear weapons. You feel that additional proliferation to less developed nations will lead to global political instability. Additionally, the more widespread nuclear weapons are, you feel, the more likely a radical nation or extremist group could acquire one.

You're well aware that Germany invests heavily on renewable and sustainable energy sources, including wind, solar, and nuclear power. An international limit on the development of nuclear technology could adversely affect the future of using nuclear power as an energy source.

Goals:

Your government's official push is for nuclear equality. Your job at this conference is to support your head diplomat and advise in technical matters that may arise during discussion.

Adrian Merkel
German Visionary Scientist

Description:

You were born a suburb of Berlin. Your father was a research biologist and your mother was a Swiss immigrant. You were the youngest of 3 children where you were favored the most by your parents. Your family moved into Berlin shortly after you were born because of a research opportunity for your father. You bonded very closely with your mother whom you saw the most. Your father did not spend much time at home though you admired him. Your father tried to get you into the field of biology and natural science but you did not enjoy the field. Instead you took an interest in pure mathematics and physics.

You left Germany and enrolled in University College at Oxford studying mathematics and physics. After graduating you took a research opportunity to study sunspots but decided that you did not like studying things that you could not see very accurately and instead turned your attention to atomic physics and quantum mechanics. You were published in the Bulletin of Atomic Scientists and later became a member of the Board of Sponsors. You did intense work on atomic physics but later went on to research fusion with the Joint European Torus (JET) and later at the particle accelerators at CERN. You made significant improvements to the JET design and operation, published several papers on the project and caught the eye of the public and the scientific community.

The President chose you to represent Germany in the IAEA Special Assembly because of your research relevance and because of your recent successes. You feel very comfortable with discussing and collaborating with other countries delegates because of your experience with CERN and the JET project. You become agitated by imprecise and assumed values but you rarely speak out against them. You find it easier to relate and confer with the members of other delegations then with your own.

Views:

You believe that your country can never disarm all of their nuclear weapons. You believe that peace between superpowers can be contingent on mutually assured destruction and that if disarmament occurs world war may again break out.

You also believe that your country cannot have other countries developing nuclear weapons. When more nations create nuclear weapons then the stability of the world may break down. If a radical nation gets a nuclear weapon it may actually use it or an Islam bomb may be given to radical extremist groups.

Your work with nuclear physics has convinced you that nuclear energy is the power for the future, and you feel that any attempt to limit the work on development of nuclear energy technology will be a detriment to the human race.

Goals:

Your goal in this conference is to advise your delegation in matters pertaining to scientific discussion.

Conrad Länder
German Chief Military Advisor

Description:

Born and raised in Munich, you were the son/daughter of two extremely patriotic German parents. You, however, did not share the extremely patriotic nature that your parents did. They claimed that you were taking Germany for granted. You excelled in school and studied abroad at an American university. Upon furthering your education and broadening your horizons you realized why your parents were in love with Germany and you apologized to them. You returned home and joined the German military. You served in several public and covert operations as a member of the German Special Forces.

You were promoted to infantry brigade commander. The German military then sent you to attend the United States Marine Corps Command and Staff College in Quantico, Virginia. You returned back to Germany to command the Paratroop Brigade. Your tenacity and intolerance of nonsense propelled your rapid rise through the ranks of senior military positions. You have commanded the military stationed in every region of Germany and served several tours in Afghanistan. Your operational record is impeccable and you were promoted to Chief of the General Staff.

Your record and reputation has caught the eye of the President of Germany. The President has asked you to attend the Special Assembly of the IAEA and represent German military interests.

Views:

Mutually assured destruction works, when all nations can be assumed to be reasonable, and reasonable people can be assumed to be in charge of the government. You believe most government powers see how foolish it would be to launch a full nuclear strike, even some of the more radical Islamic ones. However, it is too often been shown that the leadership of countries like Iran, Iraq, and Lebanon are not in control of their country. Disarmament of these countries - which have shown themselves to be unstable - is critical to ensure the survival of world peace as a whole.

Goals:

Your job at this conference is to advise the head diplomat in matters pertaining to military discussion.

Bin Huang
Chinese Visionary Scientist

Description:

You born in Beijing and your parents are both natives of Hong Kong. Your parents have always lived poor, barely getting by. Both were somewhat self-educated but were barely able to read. You respected your parents for working hard and getting by throughout your child despite the fact that you lived on the edge of poverty and malnutrition. You knew early on that you wanted to get out of poverty and get an education so you made your whole focus on your childhood education.

You were not particularly gifted in mathematics and science but you tried very hard and got excellent grades. You were eventually accepted into the Massachusetts Institute of Technology where you got your doctorate in computer science doing your thesis on quantum computing and nanotechnology. You lectured for many years as a professor of computer science. You returned to China and took courses in nuclear physics at Harbin Engineering University, it was here you met with Banping Li, with whom you exchanged ideas from your respective fields. You continued your work on quantum computing and eventually received the Wolf Prize for you international studies in the field. You are currently working with the Chinese Space Agency, where you have been working for the past 7 years on developing technology for the growing space program.

At the urging of your colleague, you have been chosen to represent China at the IAEA Special Assembly because of your knowledge of physics and your international experience. You are confident and proud of your life and feel secure in your abilities. You feel that you are one of the best educated people at the Assembly, a mentality that is sometimes exposed in discussion.

Views:

Mutually assured destruction works, when all nations can be assumed to be reasonable, and reasonable people can be assumed to be in charge of the government. You believe most government powers see how foolish it would be to launch a full nuclear strike. You believe that your country should be allowed to have its own stockpile of arms in order to be part of the international balance.

You also want to leave the door open to the development of nuclear technology for the future, whether it be military, civilian, or for space exploration.

Goals:

Your job at this conference is to advise the head diplomat in matters pertaining to scientific discussion.

Jiang Lo
Chinese Head Diplomat

. **Description:**

Hardship began early in your life. You were born and immediately lost the person who loved you most in the world. As you were growing up, you felt the weight of this loss bear on your shoulders and found it very difficult to make friends in the orphanage. Luckily, you simply directed all of your energy into schoolwork and received a full scholarship and admittance into Oxford.

When you were accepted you decided to attain your law degree. Now that you are becoming successful you find it easier to relate to the other students in the college and begin making friends. You love the English people and their ways.

After you receive your law degree, you decide to go back to China and defend people who can not defend themselves. It is your way of saving the people who you easily could have become yourself.

Nuclear weapons begin to interest you because you know that Russia or the US could easily trigger the mass annihilation of the human race. You served as a member of many committees including the Foreign Affairs and Security committees.

Serving many years at this post the current Prime Minister asked you to represent North Korea at the IAEA special assembly. You are a fierce and determined diplomat; you do not stand down from what you think is right. You believe that a well defended difference of opinion is something to be respected, but you have little tolerance for ignorance of the subject at hand and disrespect when it comes to diplomatic discussions.

Views:

You believe that your country can never disarm all of their nuclear weapons. You believe that peace between superpowers can be contingent on mutually assured destruction and that if disarmament occurs world war may again break out.

You also believe that your country cannot have other countries developing nuclear weapons. When more nations create nuclear weapons then the stability of the world may break down. If a radical nation gets a nuclear weapon it may actually use it or an Islam bomb may be given to radical extremist groups.

Goals:

- Disarm Small Nations
- Prevent Disarmament of your country.

Banping Li
Chinese Chief Technical Advisor

Description:

You grew up in the capital city of Beijing and like most people in China you were very interested in science and technology because you believe it is a way to enhance your country. In grade school you did very well in mathematics and in secondary school you found a great love for physics. You transferred this love over to college.

You went to Harbin Engineering University. Here you took physics classes that pertained to nuclear power. You enjoyed them very much and in no time at all you had your PhD in nuclear physics. Since you went to a school focusing on technology you were very interested in creating machines that could begin to enrich uranium up to a grade that can be used for power.

This focus on enrichment technology is what landed you a job in a top secret Chinese facility that was dedicated to the Chinese nuclear program. Here you worked on attempting to enrich uranium, but most of the scientists at the facility found it near impossible to create. The facility obtained information about the devices from Russia and North Korea from sources that are unknown to you.

You have begun to suspect that the enrichment process you are working on will be further so that weapons grade material can be produced. You brought this up with your manager and he did not deny your claims. He then told you the government was looking for a scientific advisor for an upcoming special assembly of the IAEA. You gladly accepted, but were told to keep quiet about the facility and weapons.

Views:

You believe that your country should have the means to develop and create nuclear weapons. You believe it is essential for your country to have nuclear arms in order to balance the threat from western powers like the United States.

You also believe that the countries that already have nuclear weapons should have to disarm before they can begin to suggest what your country should do with its own nuclear weapons program. You will attempt to disguise your nuclear program as just a program for power and not for weapons because you know how the rest of the world would react.
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Goals:

Your role is to support your head diplomat and advise in scientific matters relevant to current discussion points.

Personally, you want your government to succeed in creating nuclear weapons because you believe it will give you power across the globe. You also need to push nuclear powerhouse countries to disarm so that they do not have a huge weapons stockpile compared to that of your country. You also do not mind if other countries develop nuclear weapons because it is a natural way to balance the power of the nations.

Objective Statement

Nuclear proliferation is on the rise. Equipment, material and training were once largely inaccessible. Today, however, there is a sophisticated worldwide network that can deliver systems for producing material usable in weapons. The demand clearly exists: countries remain interested in the illicit acquisition of weapons of mass destruction.

If we sit idly by, this trend will continue. Countries that perceive themselves to be vulnerable can be expected to redress that vulnerability – and in some cases they will pursue clandestine weapons programs. The supply network will grow, making it easier to acquire nuclear weapon expertise and materials. Eventually, inevitably, terrorists will gain access to such materials and technology, if not actual weapons.

If the world does not change course, we risk self-destruction.

Common sense and recent experience make clear that the Nuclear Nonproliferation Treaty, which has served us well since 1970, must be tailored to fit the 21st-century realities. Without threatening national sovereignty, we can toughen the nonproliferation regime.

Only a few years ago, the founder of Pakistan's nuclear weapons program, Abdul Qadeer Khan has signed a detailed confession admitting that during the last 15 years he provided Iran, North Korea and Libya with designs and technology to produce the fuel for nuclear weapons. Dr. Khan's admission amounts to one of the most complex and successful efforts to evade international controls to stop nuclear proliferation.

Khan has opened our eyes as to just how easy it is to disseminate nuclear secrets to countries around the world. The IAEA needs to create new policy and broaden its power in order to combat this 21st-century proliferation. This new global community has become irreversibly interdependent, with the constant movement of people, ideas, goods and resources. In such a world, we must take steps to combat proliferation with an infectious security culture that crosses borders.

The first step is to tighten controls over the export of nuclear material, a priority Former President Bush identified in a speech on nuclear nonproliferation. The current system relies on a gentlemen's agreement that is not only nonbinding, but also limited in membership: it does not include many countries with growing industrial capacity. And even some members fail to control the exports of companies unaffiliated with government enterprise.

We must universalize the export control system, remove these loopholes, and enact binding, treaty based controls – while preserving the rights of all states to peaceful nuclear technology. We should also criminalize the acts of people who seek to assist others in proliferation.

In parallel, inspectors must be empowered. Much effort was expended – and rightly so – in persuading Iran and Libya to give the IAEA much broader rights of inspection. But the agency should have the right to conduct such inspections in all countries. Verification of nonproliferation treaty obligations requires more stringent measures, but to date, fewer than 20 percent of the 191 United Nations members have approved a protocol allowing broader inspection rights. Again, as President Bush suggested, it should be in force for all countries.

In addition, no country should be allowed to withdraw from the treaty. The treaty now allows any member to do so with three months notice. Any nation invoking this escape clause is almost certainly a threat to international peace and security.

This provision of the treaty should be curtailed. At a minimum, a withdrawal should prompt an automatic review by the United Nations Security Council.

The international community must do a better job of controlling the risks of nuclear proliferation. Sensitive parts of the nuclear fuel cycle – the production of new fuel, the processing of weapon-usable material, the disposal of spent fuel and radioactive waste – would be less vulnerable to proliferation if brought under multinational control. Appropriate checks and balances could be used to preserve commercial competitiveness and assure a supply of nuclear material to legitimate would-be users.

Of course, a fundamental part of the nonproliferation bargain is the commitment of the five nuclear states recognized under the nonproliferation treaty to move toward disarmament. Recent agreements between Russia and the United States are commendable, but they should be verifiable and irreversible. A clear road map for nuclear disarmament should be established – starting with the major reduction in the 30,000 nuclear warheads still in existence, and bringing into force the long-awaited Comprehensive nuclear Test Ban Treaty.

If the global community is serious about bringing nuclear proliferation to a halt, these measures should be considered at this special assembly. **(ElBaradei, 2004)**

Sample 'Wish List'

- Need to be able to go to the UN General Assembly for reworking the NPT to function as an international law instead of a voluntary agreement.
    - No withdrawal allowed
    - Universal and binding on all countries
- If countries violate the terms of the NPT, harsh punishments should be leveled
    - Loss of existing technology/material loans
    - Prevent nations in good standing from trading nuclear material and technologies with members not in good standing
- Classification of countries as 'vendor' and 'non-vendor'
    - Vendor nations submit to special scrutiny of facilities and logistics
        - Random, frequent, and unannounced inspections of facilities
            - Civilian and Military
        - Maintain complete accountability for all materials
        - Must comply with some sort of disarmament if weapons-capable
    - Non-vendor nations are allowed to acquire technology and materials *only* from vendor nations.
        - Domestic fuel enriching in non-vendor nations is allowed
            - Same random, frequent, and unannounced inspections of enriching facilities
                - Civilian and Military
            - Enriching facilities would be on vendor nation soil, but material would be property of non-vendor nation
        - Non-vendor nations with only nuclear reactors
            - Annual, unannounced inspections of reactor facilities
            - Permanent liaison
- Countries require approval to pursue nuclear weapons
    - Permanent IAEA liaison on-site of weapons facilities
        - Action taken if liaison is compromised?
        - No liaison, no operation
- Rights of countries with no nuclear facilities but at risk from foreign facilities near the border?
- Actions taken when nuclear materials is determined to be missing?
    - Rights of the IAEA to intervene?
    - Who is responsible?
- Actions taken in countries when standing government is losing control of the population?
    - Custody of reactors, breeding facilities, enriching plants, etc.
        - Responsibility of IAEA, Vendor, someone else?
- Actions taken when countries are found to be secretly enriching or otherwise promoting weapons proliferation?
- Do countries require approval to build, run, and maintain facilities?
    - Some sort of IAEA education/test
    - Approval of personnel
- Rewards for good conduct aside from the ability to have nuclear technologies

Rosa-dos-Ventos Plan

An adaptation from the Brazilian plan (translation for "Rose of the winds", representing of the compass, South and North, opposite poles...)

The countries of North Korea, South Africa, China, Japan, and Germany hereby present the Rosa-dos-Ventos Plan, which is a modified version of the Brazilian plan.
The Brazilian Plan is a proposed movement towards global nuclear disarmament. The plan proposes that each country that currently possesses nuclear warheads agrees to give up most, but not all, of their warheads to the UN. The Warheads would be stored in UN-controlled and monitored facilities in historically neutral countries such as: Brazil, South Africa, Japan, Germany, and possibly Australia and others. In the UN-controlled facilities, the warheads would gradually be disassembled and disposed of in a proper fashion. Not all the warheads would be dismantled; however, a reserve arsenal would be kept in the event of a non-nuclear country being the victim of a nuclear attack. In the aforementioned instance, the targeted nation would have the option of having the UN retaliate using the stockpile.
The delegations of North Korea, South Africa, China, Japan, and Germany would like to propose the following additions and changes to the current Brazilian Plan. Explicit details of this new plan will take place at future IAEA meetings, however these nations feel it is necessary to make the other nations aware of the format of the plan and give the other nations an opportunity to debate and sign the plan.

The main goals of the plan are thus:

- All countries possessing nuclear weapons reduce arsenal by 70% in a 15-year period
- All nuclear-able countries must possess no more than 50 warheads at the end of a 25-year period
- Ideally, total disarmament by the end of a 30 year period
- All donated warheads will be stored in IAEA/UN maintained and monitored facilities in neutral countries
- Complete transparency of all member countries. Full inspections by the IAEA/UN can be made at any time

Results of the Plan:
Positive –

- Reduce each major nuclear power to an equally small number of nuclear weapons
- Non-nuclear powers that sign the treaty will be granted the same retaliation capabilities as nuclear-capable nations
- No need for individual country to pay for maintaining a nuclear arsenal, all dismantling/upkeep will be handled by the IAEA/UN or any new governing body formed (Will alleviate Russia and the US from the immense costs of nuclear maintenance)

- The arsenal could be watched and maintained by specialists of many nations; with exchange of technology, and stricter safety provisions.

Negative –

- Each country involved would be forced to give up all but a small amount of their personal arsenal

The above statements complete the proposed Rosa-dos-Ventos Plan.
In the event that the major world nuclear powers (US, Russia, and France), sign and agree to the terms of the plan, North Korea will fully stop their development on mid- and long-range missiles, along with any military nuclear research. Also, North Korea would allow inspections by the IAEA to take place in our country. However, if the three major powers listed above do not sign the pact, North Korea will not only continue its own nuclear development but also proliferate its nuclear warheads, missiles, and other weapons delivery systems. Also, if the US, Russia and France do not sign the pact, the nation of South Africa will reverse its policies and export enriched Uranium for weapons production to "friendly" nations. South Africa would also begin to reassemble and improve its own nuclear arsenal.

In witness whereof the undersigned, duly authorized, have signed this plan:

North Korea:

South Africa:

France:

United States:

Russia:

Germany:

India:

Pakistan:

Japan:

China:

Britain:

Dated February 26 2009