

CHAPTER 16

INTEGRATIVE SCIENCE/TOQWA'TU'KL KJIJITAQNN: THE STORY OF OUR JOURNEY IN BRINGING TOGETHER INDIGENOUS AND WESTERN SCIENTIFIC KNOWLEDGES

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DEDICATION

This paper is dedicated to Mi'kmaw Elders Murdena and Albert Marshall whose knowledge, wisdom, encouragement, and humour have been essential in guiding the Integrative Science program at Cape Breton University (CBU) from the time of its conception until the present day. Their guidance has come during numerous discussions at their home and the university, through the development and delivery of co-presentations across Canada, and within workshops in communities. Those of us in Integrative Science offer our deepest and most sincere thanks; their input has made our journey possible. In addition, CBU recognized their passionate and dedicated efforts to preserve, protect, and promote Mi'kmaw language, knowledge, and culture, through the conferral of Honorary Doctorates of Letters at Fall Convocation 2009.

INTEGRATIVE SCIENCE: OUR JOURNEY'S VISION

A dream that the educational mainstream might one day recognize Indigenous science alongside Western science has been nurtured by various members of the Mi'kmaw Nation for a long time, and it is a dream shared with many of the world's other Aboriginal and Indigenous peoples. For Murdena Marshall of Eskasoni First Nation, this dream has been an important life aspiration. Murdena is an Elder and Spiritual Leader for the Mi'kmaw Nation, and an Associate Professor (retired) of Mi'kmaq Studies at Cape Breton University (CBU) in Sydney, Nova Scotia, Canada. It is not surprising, therefore, that the Integrative Science program came into existence at CBU, an institution that is home to more Mi'kmaw students than any other post-secondary institution in Mi'kma'ki (Nova Scotia, New Brunswick, Prince Edward Island, the Gaspé region of Québec, Newfoundland, and parts of northwestern Maine), the traditional territory of the Mi'kmaw people. This paper sketches the origins of CBU's Integrative Science program within the post-secondary educational arena, as well as its growth into the other arenas of science, namely research, applications, and outreach.

"Integrative Science" (English) or "Toqwa'tu'kl Kjiijitaqnn" (Mi'kmaq) is unique. Its overall vision is to

bring together scientific knowledges from Indigenous (or Aboriginal) and Western (or Eurocentric, conventional, or mainstream) worldviews for the purposes of science education, science research, science applications, and science outreach to youth and community (Cape Breton University 2010). Those of us working in the Integrative Science program at Cape Breton University frequently explain this vision with the aid of a painting by artist Basma Kavanagh in which two people face each other while kneeling before a sacred fire of mutual trust and shared learning. Through their actions, they bring together their respective worldviews of Indigenous and Western scientific knowledges, to generate an expanding ground of common understanding and a deepening respect for differences.

Integrative Science considers science to be "dynamic, pattern-based knowledge shared through stories about our interactions with and within nature." This view acknowledges that different cultures may shape and share their stories in different ways by using few or many of the multiple intelligences ("pattern smarts") of humans. Of the nine intelligences recognized by Harvard University psychologist Howard Gardner, Western science privileges logical-mathematical and linguistic intelligences. More holistic sciences, such as those of many Aboriginal and other Indigenous peoples, tend to enrich these by further drawing upon the interpersonal, intrapersonal, musical, body-kinesthetic, spatial, naturalistic, and/or spiritual intelligences.

INTEGRATIVE SCIENCE IN THE POST-SECONDARY SCIENCE EDUCATIONAL ARENA: OUR JOURNEY BEGINS

The creation of Integrative Science at CBU can be traced to specific interest expressed by representatives from the Mi'kmaw First Nation community of Eskasoni in the mid-1990s for university-level action that would begin to reverse two situations:

1. The almost total absence of Mi'kmaw students in CBU's science and science-related programs, including the failure or drop-out within a few months by those who did begin [a situation also seen among other

- Aboriginal peoples and universities across Canada]; and
2. The failure within the science community to acknowledge Indigenous knowledge in science or science-related curricula.

Mi'kmaw community members felt that action towards reversing the second point could serve as an essential, concurrent step to reverse the first; i.e., it was felt that culturally inclusive curricula would help attract and retain Mi'kmaw students into and within post-secondary science. The low to non-existent participation in university level science by Mi'kmaw students was worrisome in the face of the rapidly increasing needs in all Mi'kmaw communities for scientifically educated personnel in sectors such as health and medical services, natural resource planning and management, and elementary through high school education. Furthermore, this low to non-existent participation in science was vexing in that for thousands of years prior to the arrival of Europeans, the Mi'kmaw people were the scientists of Atlantic Canada—they had rich and complex knowledge about the medicines, the plants, and the animals in their waters, lands, and skies and they transmitted and enriched this knowledge, generation to generation, via highly effective, traditional modes of teaching and learning.

Consequently, a small group of visionaries from Eskasoni and CBU gathered together to consider meaningful new actions that could help reverse the low participation by Mi'kmaw students in post-secondary science. The group met throughout December 1996 to June 1997 and a proposal emerged for Integrative Science with new, customized science courses as the vehicles for key foundational ideas, including: bring Indigenous and Western scientific knowledges and ways of knowing together in the science curriculum; teach in an integrative way the knowledges from various disciplines of Western science; include consciousness as a central curricular topic; and employ a holistic pedagogy that emphasizes all aspects of being human, namely the physical, emotional, cognitive, and spiritual. These new courses were given the label “MS+T,” a Mi'kmaw word meaning “everything together” [note: The “t” in the Mi'kmaw word MS+T is the letter schwa, introduced to written Mi'kmaq by the Smith-Francis orthography. This letter is not found in the Roman alphabet although in pronunciation guides for English words the schwa sound is often phonetically represented as “ə”.]. On June 19, 1997, the proposal was released to CBU academic deans and departmental chairs. The cover letter was signed by Murdena Marshall, then an Associate Professor of Mi'kmaq Studies at CBU. On June 25, 1999, CBU's Board of Governors approved Integrative Science as a concentration within the Bachelor of Science Community Studies four-year degree, as did the Maritime Provinces Higher Education Commission (MPHEC) on February 5, 2001.

Integrative Science at CBU truly came into reality with the first cohort of students who entered a pilot offering of the first year MS+T courses in Fall 1999. This cohort also saw the program's first graduates, in Spring 2003. Between 1999 and 2005, Integrative Science in conjunction with MSAP (Mi'kmaq Science Advantage Program) as a companion recruitment initiative (administered by the Mi'kmaq College Institute at CBU), caused the numbers of Aboriginal students in science at CBU to change dramatically, going from near zero to over 100 who had experienced a first year of post-secondary science. About half of these 100 students continued at CBU beyond first year, some choosing to remain within the Integrative Science program, some transferring into other science and science-related programs, and some transferring into arts or business programs. Moreover, between 2000 and 2005, the Natural Sciences and Engineering Research Council (NSERC) of Canada approved 13 NSERC USRAs (Undergraduate Student Research Awards) for Mi'kmaw students in the Integrative Science program (representing 13 to 33 percent of the national total of such awards at the time).

INTEGRATIVE SCIENCE GROWS WITHIN SCIENCE EDUCATION AND MOVES INTO OTHER SCIENCE ARENAS: OUR JOURNEY CONTINUES

Key Challenges in Creating and Teaching Integrative Science Curricula.

Gregory Cajete (Native American scientist and educator, University of New Mexico) identified the central dilemma in science education today as being the teaching of science from only one cultural perspective and in an incomplete and non-connected manner (Cajete 1986). Thus, the first major challenge immediately faced in creating the new MS+T courses for Integrative Science was the “how” in bringing together Indigenous and Western knowledges. In this regard, the conceptual parents of Integrative Science had no programs elsewhere that could be looked to as a model because in the mid-1990s and continuing to the present time, Integrative Science as a post-secondary science degree program is the only one of its kind in the world. Strength and inspiration were found in the “Spirit of the East” (Wjipenuk Etek Lnuimlkikno'ti) whereby the East is seen, through its association with the sunrise, as a place of beginnings and enlightenment, and a place where new knowledge can be created or received to bring about harmony or right relations. The conceptual parents found further strength in knowing that science as a “way of knowing” (regardless of the culture) is dependent upon transformational consciousness towards thinking in new ways. In Fall 1999, with the first students in the Integrative Science MS+T classroom, we simply followed Cajete's advice to “just start, have the courage to learn by doing, and emphasize creativity;” in retrospect, we realize his advice was perfect.

Beyond the challenge of being the first to conceive and implement a post-secondary science program to bring together scientific knowledges from Indigenous and Western world views, we also acknowledged four other key challenges in creating and teaching Integrative Science, namely:

1. Indigenous science has spirituality at its core or heart, whereas spirituality is said to be absent in Western science;
2. Indigenous science is a living knowledge, whereas Western science education is heavily book-based;
3. Indigenous science emphasizes “change, wholeness, and balance,” whereas Western science emphasizes practitioner specialization and a focus on parts; and
4. Today’s students are very familiar with computer-mediated entertainment and communication but they tend to have impoverished personal understandings of nature, i.e., the subject of scientific knowledges.

A Multi-Piece Approach to Meeting Challenges in Creating and Teaching Integrative Science Curricula.

Although the above were key challenges, the lack of familiarity with nature on the part of our students was the greatest. Our efforts to meet and overcome these challenges involve a multi-piece approach, summarized below (those marked “*” are then explained further):

1. Create numerous and diverse out-of-doors learning experiences;
2. Involve community Elders, resource people, organizations, and workshops or other events, as appropriate, and as much as possible;
3. Employ project-based learning using issues of interest to students either personally or to their communities;
4. Use the ever-growing literature on traditional ecological knowledge and other published information on the Indigenous sciences;
5. Use Aboriginal learning concepts and pedagogy, as appropriate (e.g., Circle of Learning);
6. Teach in an integrated manner the major disciplines of Western natural science, namely cosmology, physics, chemistry, geology, and biology plus, as possible and appropriate, understandings from neuroscience and consciousness studies;
7. * Employ an overall “integrative framework;”

8. * Be prepared to co-learn with students and community;
9. * Employ “Two-Eyed Seeing” as a guiding principle; and
- 10.* Acknowledge and employ a “pattern recognition, transformation, and expression” conceptual framework for coming to see how different cultures may shape and share their science stories in different ways.

An Integrative Framework for Integrative Science.

We use “integrative” (*not* “integrated”) to denote an on-going co-learning journey that can be viewed as framed by four key elements:

1. The acknowledged role of you and me as creatively capable agents in our knowledges, and especially the importance of:
 - mindful reflectivity and evolution in our knowing, valuing, and doing, and
 - pattern recognition, transformation, and expression in our scientific knowledges and ways of knowing;
2. An understanding of our common ground as holders and/or practitioners of different scientific knowledges;
3. An understanding of our differences and a respect for them; and
4. A recognition of our need to walk and work together in our journeys on Mother Earth today.

The University of Alaska at Fairbanks has developed a concept map (Stephens 2000). This concept map was not available when we started our own efforts towards conceptualizing and teaching Integrative Science. However, we find that it is particularly helpful for our efforts in that it uses an easily understood format to portray the common ground and differences, as per points two and three in our integrative framework. We frequently, therefore, point interested others towards Stephens’s concept map.

Eleven Lessons Learned for Co-Learning—Towards Two-Eyed Seeing.

Our first research collaboration, funded by CIHR-IAPH (Canadian Institutes of Health Research—Institute of Aboriginal Peoples’ Health), saw university researchers and Mi’kmaw Elders from Unama’ki—Cape Breton embark on a three-year project entitled “Integrative Health and Healing: co-learning our way to expanding wholeness through restoration of relationships with the land.” The project was designed as a co-learning journey within a community-based, participatory action health research project. Its goals were two fold: (1) to find ways to bring the vigour language and un-

derstandings of the Indigenous sciences together with the rigour language and understandings of the Western sciences within the context of (2) seeking ways to revitalize traditional Mi'kmaw understandings about interconnectiveness in the cosmos, towards relevancy in the lives of today's children. With respect to the latter, the project specifically focused on ways thought to foster root level growth for healthy living and healthy communities by emphasizing nature, creative relationship, and creative choice as elements in the life paths of children. Numerous sub-projects (three are described later) were created to help foster a child's sense of place, emergence and participation within nature and thus, to contribute to their expanding sense of wholeness within environment (family, community, and ecosystem).

The guiding principle for the overall project was wisdom found in words generally attributed to the late Spiritual Leader, Healer, and Chief Charles Labrador, Acadia First Nation, Nova Scotia: "Go into the forest, you see the birch, maple, pine. Look underground and all those trees are holding hands. We as people have to do the same." In this regard, the project identified "eleven lessons learned for co-learning" culminating in Two-Eyed Seeing. Briefly, these are:

1. Acknowledge we need each other.
2. Acknowledge we are on a learning journey ... and more: a co-learning journey.
3. Learn to co-learn: employ a simple integrative framework.
4. Help institutions of higher learning to help community Elders and educators make traditional Aboriginal knowledge real (legitimate, valid, or authentic) *in the minds of youth* (and many others), realizing that universities convey an intellectual authority with which Elders and other Traditional Knowledge Holders may not be able to compete, given today's complex, multi-media world.
5. Work with agendas that can respond to the group's emergent relational consciousness, expanding understandings, and ever changing circumstances.
6. Use organic language (e.g., community capacity growing), as possible, while also acknowledging the pervasiveness of mechanistic and/or architectural language (e.g., community capacity building).
7. Do ... in a creative, grow-forward manner.
8. Think "knowledge gardening" more than knowledge translation or knowledge transfer.
9. Navigate the co-learning journey by weaving back and forth between our knowledges or world views.
10. Navigate our weaving via awareness of

"big patterns" (knowledge orientations or maps) while recognizing that there is much more beyond the poignancy of their simplicity. Four such "big patterns" are described later on in this paper.

11. Make visual our knowledges, our understandings, our stories, our guiding principles; also use metaphors. *Two-Eyed Seeing* is a powerful example.

Two-Eyed Seeing.

Two-Eyed Seeing is the descriptive label for an important guiding principle for one's journey while here on Mother Earth. Mi'kmaw Elder Albert Marshall from Eskasoni offered this principle to Integrative Science and gives voice to the gift in explaining that it refers to learning to see from one eye with the strengths of Indigenous knowledges and ways of knowing, and from the other eye with the strengths of Western knowledges and ways of knowing, and to using both these eyes together, for the benefit of all.

Two-Eyed Seeing seeks to avoid portraying the situation as a "clash of knowledges" or as contributing to "knowledge domination or assimilation." We recognize that in a particular set of circumstances we may choose to call upon the strengths within Indigenous science, and in another set of circumstances those within Western Science. Thus, Two-Eyed Seeing will often require a "weaving back and forth" between the perspectives represented. It intentionally and respectfully brings together our different knowledges and ways of knowing, to motivate people, Aboriginal or non-Aboriginal alike, to use all our gifts so we leave the world in a better place and thus the opportunities for our youth (in the sense of Seven Generations) will not be compromised by our inaction. Two-Eyed Seeing asks us to see our strengths, the best in our ways of knowing, while also asking us to respect and celebrate our differences.

Two-Eyed Seeing acknowledges the necessity of formal structure yet that it must be permeable to and receptive of new understandings and opportunities, i.e., understandings associated with "Spirit of the East" which brings the "gift of newness, of transformation." For example, we might often need to be able to shift our views of a printed agenda such that it is "living," i.e., capable of responding to the energies in the present moment (with its encompassing past and future) rather than being seen as a rigidly enforced document incapable of "being and becoming." In other words, our efforts must be able to respond to emergent relational consciousness and collectiveness within an understanding of, of example, health and wisdom as expanding senses of wholeness within Creation.

A Conceptual Framework for Pattern Recognition, Transformation, and Expression.

This SSHRC (Social Sciences and Humanities Research Council) funded research seeks to enrich Integrative Science efforts to bring together scientific knowledge from Aboriginal (or Indigenous) and Western (or Eurocentric, conventional, or mainstream) worldviews for the purposes of science education. Specifically, it explores the use “pattern recognition, transformation, and expression” to create understandings around common ground as well as to create understandings about differences, with respect to the ways we shape and share our science knowledges, i.e., *our dynamic, pattern-based stories about our interactions with and within nature*. Towards this goal, we developed a conceptual framework that seeks to enable transit of pedagogy and praxis across the boundaries of methodologies, disciplines, and world views.

It is a simple, three-piece, iterative approach:

1. Observation of “external natural pattern” is sensory, drawing upon sanctioned or privileged perspectives from methodologies, disciplines, or world views contextualized by mimesis (subject-subject participatory reciprocities) or alterity (subject-object causal relationships).
2. Interpretation is poetic, drawing upon sanctioned or privileged intelligences (from among the nine in Gardner’s “multiple intelligences theory”) to yield “internal ideal pattern.”
3. Expression (communication, sharing) is kinetic, pulling this internal out as “external abstract pattern,” again drawing upon sanctioned or privileged intelligences.

This research is ongoing, and the nine intelligences (from Gardner’s Multiple Intelligences Theory) that the research uses are: logical-mathematical, linguistic, interpersonal, intrapersonal, musical, body-kinesthetic, spatial, naturalistic, and/or spiritual (existential). Two examples of our research in this regard looked at “relationships among Grandfather Sun, Mother Earth, and the human knowledge participant” and “relationships among plants and the human knowledge participant.” For descriptions, see Kavanagh et al. 2006 and Lefort et al. 2006.

We have also developed synopses and visuals of “Four Big Patterns” to enable knowledge recognition and navigation, as per the “weaving back and forth” between Indigenous and Western perspectives required in Two-Eyed Seeing. We use the broad categories of “Western” and “Indigenous” pragmatically, invoking simple extremes in an intentional effort to encourage cognitive fluidity and the ability to orient within “our place of beginnings” for collaborative, cross-cultural work. As Elder Albert Marshall indicates “we need to

know who we are and where it is we come from, if we are to envision where we want to go.” We need a place of beginnings. Our Integrative Science journey has shown that more sophisticated understandings, articulations, and instantiations can and will emerge as participants develop relationships of mutual trust and respect and engage in co-learning. On the other hand, we have also experienced that when the need for co-learning is not acknowledged (let alone implemented), a cross-cultural, collaborative initiative can easily falter and in dramatic ways. Our “Four Big Knowledge Patterns” are outlined below.

1. *Our World*: This relates to *ontologies*, as we share a desire for our knowledges to have an overarching understanding of “how our world is,” albeit with differences as to what we deem these to be. The “big pattern” question here is: what do we believe the natural world to be?
 - A possible response from within Indigenous science is: beings...inter-connective and animate...spirit + energy + matter...with constant change (flux) within balance and wholeness.
 - A possible response from within Western science is: objects...comprised of parts and wholes characterized by systems and emergences...energy + matter...with evolution.
2. *Our Key Concepts and Actions*: This relates to *epistemologies*, as we share a desire for our knowledges to observe key values albeit with differences as to what we deem these to be. Our “big pattern” question here is: what do we value as “ways of coming to know” the natural world, i.e., what are our key concepts and actions?
 - A possible response from within Indigenous science is: respect, relationship, reverence, reciprocity, ritual (ceremony), repetition, responsibility (*after* Archibald 2001).
 - A possible response from within Western science is: hypothesis (making and testing), data collection, data analysis, model and theory construction.
1. *Our Language and Methodologies*: We can focus on core concepts for the *languages and methodologies* that structure our knowledges, as we share a tendency to want such albeit with differences as to what we deem these to be. The “big pattern” question here is: what can remind us of the complexity within our ways of knowing?
 - A possible response from within Indigenous science is: *weaving* of patterns within

nature's patterns via creative relationships and reciprocities among *love, land, and life (vigour)* that are constantly reinforced and nourished by *Aboriginal languages*.

- A possible response from within Western science is: *un-weaving* of nature's patterns (especially via *analytic logic and the use of instruments*) to cognitively reconstruct them, especially using *mathematical language (rigour)* and computer models.
2. **Our Overall Knowledge Objectives:** We can focus on *objectives*, as we share a desire for our knowledges to have overall purpose albeit with differences as to what we deem these to be. The "big pattern" question here is: what overall goals do we have for our ways of knowing?
- A possible response from within the indigenous science is: collective, living knowledge to enable nourishment of one's journey within expanding sense of "place, emergence and participation" for collective consciousness and inter-connectiveness...towards resonance of understanding within environment... towards long-term sustainability for the people and natural environment (tested and found to work by the vigorous challenges of survival over millennia).
 - A possible response from within Western science is: dynamic, testable, published knowledge independent of personal experience that can enable prediction and control (and "progress")...towards construction of understanding of environment... towards eventual understanding of how the cosmos works (tested and found to work by the rigorous challenges of experimental design).

EXAMPLES OF INTEGRATIVE SCIENCE WITHIN PROJECTS FOR CHILDREN: OUR JOURNEY EXPANDS FURTHER

Various sub-projects within our collaborative project "Integrative Health and Healing: co-learning our way to expanding wholeness through restoration of relationships with the land" sought ways to revitalize traditional Mi'kmaw understandings about interconnectiveness, towards relevancy in the lives of today's children. Three are described below.

Nipuktuk Wejiaql A'tukuaqnn Project: From The Forest Comes Our Story.

Various young people working within Integrative Science made puppets for the characters in Mi'kmaw legends, for example, rabbits, bears, squirrels, and owls. These were constructed using materials eas-

ily collected in the forests of Unama'ki, Cape Breton, such as twigs, moss, bark, and leaves. The forest animals and materials used to make the puppet characters gave this project its name: *Nipuktuk Wejiaql A'tukuaqnn* (From The Forest Comes Our Story).

Puppet shows were performed on many occasions for audiences of children and/or adults. After shows at elementary schools, we generally held a workshop immediately afterward in which children created their own puppets. Posters of the forest animal puppets plus a Kluscap puppet and a Chief puppet were created for broad distribution to schools and other interested organizations, nine posters in total. Each poster featured a puppet and some annotation, photographs of the natural materials used to create the puppet, and the Mi'kmaw, English and scientific names for these natural materials or their plant species of origin.

Mi'kmawe'k Tepknusetk Project: Mi'kmaq Calendar.

The Mi'kmaw language identifies nature's calendar by naming the different times of the year based on significant, natural events in the local ecosystems, for each particular moon cycle. Thus, the Mi'kmaq Calendar (*Mi'kmawe'k Tepknusetk*) can be represented as a cycle of key events in the waters, forests, and skies of the traditional territory of Mi'kma'ki. For example, the time of *Sqoljuiku's* recognizes that the frogs are croaking, which roughly corresponds to the month of May in Unama'ki, Cape Breton. To promote and share this living knowledge wherein there is a strong linkage of language with nature, we created a Mi'kmaq Calendar poster that depicts key events as simple icons: a frog for frog croaking time, berries for berries are ripe time, and a sun for bright white snow time, etc.

In addition to the Mi'kmaq Calendar poster, an Ecosystem Health Consciousness poster series was conceived, with a separate poster for each moon month that explores the theme "difference, pattern, and variation." The first of these to be made available, the *Sqoljuiku's* poster, shows the *different* species of frogs and toads found in Unama'ki, Cape Breton (there are seven species), the comparative visual *pattern* of their life cycle stages (adult, eggs, tadpole), and the descriptive information about *variation* in their habitats and life histories.

Toqikutimk Project: Growing Together—Our Children, Our Sunflowers.

Toqikutimk is a Mi'kmaw word meaning "growing together." We chose it as the label for creative learning opportunities we made and did with children in Grades P to 6. By doing them together, we wanted to "grow together"...to plant positive, creative, and nourishing understandings and experiences with our children. It was our hope that we could help our children grow strong, with deep pride in themselves, their abilities, and their culture. Furthermore, via fostering this strength and

pride, we hoped to help them be better able to avoid developing unhealthy personal and social behaviours when they encountered challenging or bad influences in their environments.

With the creation of a *Toqikutimk* sunflower project, we hoped to foster an understanding of the metaphoric relationships between growing children and growing sunflowers. Children, as planters of sunflower seeds and then caretakers of the emerging plants, were guided towards making observations of their sunflowers over the spring, summer and fall seasons. In this way, they watched and cared for their sunflowers from the seedling stage through young plant to blooming and seeding stages. As the children did this, we hoped they would see the vigour and beauty of sunflowers growing in rocky or fertile soil, windy or sheltered locations, and weedy or groomed spots within our communities. The project acknowledged that successful growth of sunflowers in many sites required the children to provide tender loving care (TLC). Therefore, a *Toqikutimk* Sunflower Booklet (encouraged by the RCMP Detachment in Eskasoni First Nation and funded by the Mounted Police Foundation) has been created showing various TLC possibilities in conjunction with activities that promoted new self worth and healing growth through coming to see relationships with the sunflowers. The booklet encouraged the children to involve their family, teachers, RCMP officers, and other community members in the sunflower project. We wanted to engage children in a meaningful, hands-on activity that inspires imagination, cultural awareness, community relationships, and positive personal growth.

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