AJMAL
NAZIR AJMAL MEMORIAL COLLEGE OF EDUCATION, HOJAI
ESTD: 2014

Unit IV · The Learner as an Individual

Individual Differences

Kaji Minhajul Hoque
NazirAjmalMemorial College of Education


Which one do you like
from this
Basket?

Meaning of individual differences

- **Individual difference** = the variation among learners in physical, mental, emotional and social traits
- No two learners are exactly alike, not even **identical twins**
- Differences are seen in:
  - between one learner and another
  - between the traits of the same learner
- **Example:** Ravi is brilliant in Maths, weak in language and shy with strangers

1869, Hereditary Genius, Francis Galton

Uniqueness is the rule, not the exception

Definitions

Skinner	Individual differences include **any measurable aspect of the total personality**
Carter B. Good:	The variation among individuals in regard to single characteristics or a number of characteristics.
Tyler	The study of the **extent and nature of differences** among individuals in measurable traits
Osborne:	Individual differences as **dissimilarity** between persons that distinguish them from one another.

Nature of individual differences

- **Universal**: present in every learner, class and culture
- **Quantitative and qualitative**: how much (IQ 95 vs 120) and what kind (likes music vs sports)
- **Normal distribution**: most are average, few are at the extremes
- **Measurable**: through tests of intelligence, aptitude and interest
- **Dynamic**: changes with age, training and experience
- **Shaped by** heredity and environment together

Areas of individual differences

Physical
height, vision, hearing, health, energy

Intellectual
intelligence, memory, reasoning, speed

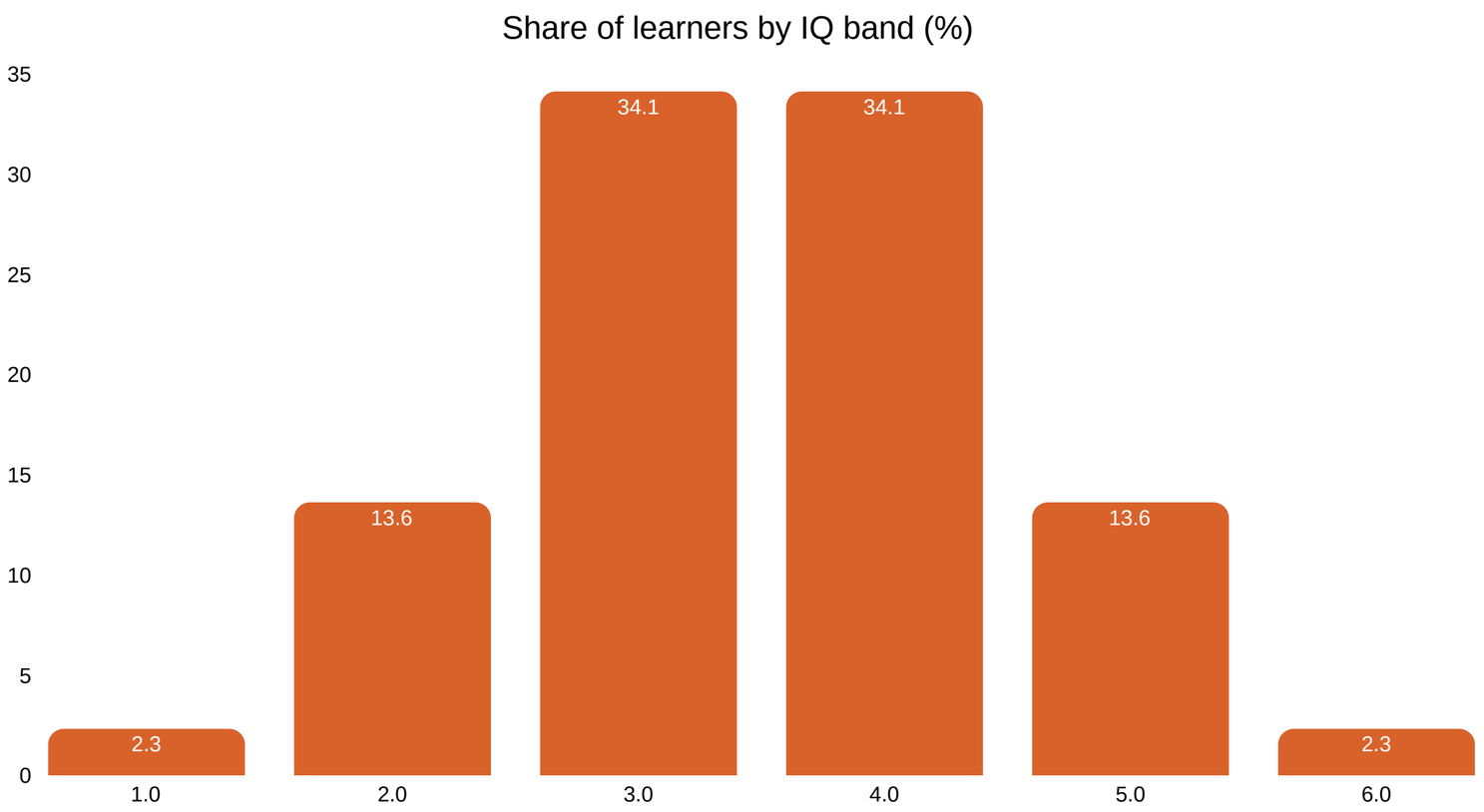
Emotional
anger control, anxiety, confidence

Social
leader or follower, cooperative or shy

Interest and aptitude
music, sports, science, art

Language and culture
mother tongue, home background

Normal distribution of ability



- **About 68%** are in the average band (IQ 85–115)
- **About 2%** score above 130: gifted
- **About 2%** score below 70: need special support

Takeaway: plan for the whole range, not only the average

Factors Affecting Individual Differences

Heredity

- **Heredity**: traits passed from parents through genes and chromosomes
- Influences body build, skin and eye colour, **basic intelligence potential**, temperament

- **Example:** tall parents often have a tall child; a musical family may pass on an ear for music
- Evidence: identical twins reared apart often show similar traits
- Limit: heredity gives the **range** (potential), not the final outcome

Environment

- **Environment**: all external conditions that influence the learner
- **Home**: parents' education, income, child-rearing, siblings
- **School**: teacher, peers, facilities, medium of instruction
- **Society and culture**: values, media, community, language
- **Physical**: nutrition, health, climate

- **Example:** two children with equal potential; one gets books and guidance, the other must work after school. Their achievement will differ

Heredity and environment together

Heredity
the potential

+

Environment
the opportunity

=

Individual difference
the outcome

- Neither works alone: heredity sets the **range**, environment decides **where in the range** the learner reaches

- **Example:** the same seed gives a tall plant in rich soil and a stunted one in poor soil
- Twins raised in different homes look alike but can differ in language, habits and achievement

Other contributing factors

Personal factors

- Age and maturation
- Gender and social expectations
- Health and nutrition
- Motivation and interests

Social factors

- Socio-economic status
- Culture, religion and region
- Education and training
- Peers and media

Exam tip: heredity + environment first, then these as sub-factors

Educational significance

1. **Knowing the learner**: plan from each child's level and needs
2. **Curriculum planning**: flexible and graded, with enrichment and remedial content
3. **Teaching methods**: vary them (activity, group work, individual tasks, ICT)
4. **Grouping**: flexible groups by ability or interest, changed by topic
5. **Guidance:** educational and career choices by aptitude and interest
6. **Evaluation:** varied tools suited to ability; do not judge all by one yardstick
7. **Discipline:** misbehaviour is often an unmet need, not defiance
8. **Special needs:** identify gifted, slow and differently-abled learners early; support inclusion

As a prospective secondary school teacher, how would you deal with individual differences among learners in your classroom?



Step 1: Identify the learners

- **Observe**: participation, written work, behaviour
- **Assess**: a short diagnostic pre-test at the start of a unit
- **Record**: cumulative record card and anecdotal notes
- **Talk**: to the learner, parents and the previous teacher
- **Sociometry**: peer choices to find friendships and isolated learners
- **Example:** a 5-question pre-test in Class IX Science shows 8 learners lack the basics of the topic

Step 2: Differentiate instruction

Content
what is learned: graded readings, simple and extended texts

Process
how it is learned: tiered tasks, stations, think-pair-share

Product
how learning is shown: poster, model, talk or essay (choice)

Environment
seating, quiet corner, flexible groups

Step 3: Teach for every learner

- **Multi-modal teaching**: explain + show + do (diagram, demo, activity)
- **Cooperative learning**: mixed-ability groups and peer tutoring
- **Remedial teaching** for slow learners: extra time, small steps, repeated practice
- **Enrichment** for gifted learners: projects, puzzles, higher-order questions (not just more work)
- **ICT and varied materials**: videos, apps, worksheets at different levels

Step 4: Assess, guide and include

- **Formative assessment**: quick quizzes, oral questions
- **Multiple tools**: written, oral, practical, project, portfolio
- **Feedback**: specific and kind; compare with the learner's own earlier work
- **Guidance**: refer to the counsellor; involve parents
- **Respect and inclusion**: no labels, no ridicule; high expectations for all

Conclusion

- Individual differences are **natural, universal and valuable**
- They arise from **heredity + environment** working together
- Teacher's task: **identify → differentiate → teach → assess fairly → support**
- Back to our opening question: same lesson, different marks. Now you know **why**, and **what to do**

Teach the child, not just the syllabus

Warm-up: Think, Pair, Share

Class IX · same teacher · same lesson · same test
Marks range from 28 to 95

- **Q1.** Why do the marks differ so much?
- **Q2.** Is the difference always the learner's fault?
- **Q3.** What should the teacher do about it?

Rule: write your answers now; we will check them at the end



Thank You

namce.ap.kaji@gmail.com